NACOmatic

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INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME — ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L[1]**
RNAV (GPS) Y Rwy 10R[2]
RNAV (GPS) Y Rwy 28L[2]
VOR/DME or TACAN Rwy 10L[1]
VOR/DME or TACAN Rwy 28L[1]
[1]Category E, 900-3.
[2]Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31**[1]
VOR/DME Rwy 31[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B

NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10**[1]
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28

NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**

Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15**[1]
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3

[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**

ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27**[1]
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22**[1]
VOR or GPS-A[2]

[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1

NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**

Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**

NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B

NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**

Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**

Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25**[1]
RNAV (GPS) Rwy 29
VOR-B[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA
EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR
MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA
SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT
FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY
GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT
WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT
DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID
GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)
FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT
GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY
SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID
FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT
HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27**[12]
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24**[1]
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20**[1]
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1**[1]
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2**[1]
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26**[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B**[1]
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14**[12]
LOC/DME BC-B[23]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11**[1]
RNAV (GPS) Y Rwy 11[23]
RNAV (RNP) Z Rwy 11[2]**,**800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R**[1]
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4**[1]
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17**[12]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[23]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R**[12]
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25**[1]
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7

NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]

NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL..... **ILS or LOC Rwy 21**[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]

[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L**[1]
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]

[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12**[1]
RNAV (GPS) Rwy 12[2]

[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **NDB or GPS-A**[1]
VOR or GPS Rwy 22,1000-3[2]

[1]Category D, 1000-3.
[2]NA when Rawlins FSS closed.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22**[1]
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16**[1]
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19**[1]
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

ROCK SPRINGS, WY

ROCK SPRINGS SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31**[12]
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R**[1]
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1**[1]
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R**[1]
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[3]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A,B, 1000-2; Categories C,D, 1000-3

SPOKANE INTL ..... **ILS or LOC Rwy 3**[1]
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

NAME ALTERNATE MINIMUMS

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17**[1]
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL ..... **ILS or LOC Rwy 25**[1]
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20**[1]
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/ MCALLISTER FIELD ..... **ILS Y Rwy 27**[12]
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 16,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 34,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME — TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 16, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 16,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 34,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.
NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE,ID

BOISE AIR TERMINAL (GOWEN FIELD)

DEPARTURE PROCEDURE: **Rwys 28L,28R,** turn left **Rwys 10L,10R**, turn right. Climb on BOI R-214 within 20 NM to cross BOI VORTAC at or above MEA/MCA for direction of flight.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.
DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.
DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...
...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.
NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.
DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI

TAKE-OFF MINIMUMS: **All runways,** cross departure end of runway at or above 35' AGL.
DEPARTURE PROCEDURE: **All runways,** climb direct BURLEY (BYI) VOR/DME. Continue climb on R-305 within 10 miles to cross BYI VOR/DME: R-024 CW R-054 at or above 5500; R-055 CW R-240 at or above 8000; R-241 CW R-023 at or above 5900.
NOTE: **Rwy 2,** bridge 252' from departure end of runway, 513' left of centerline, 110' AGL/4195' MSL. Stack 2205' from departure end of runway, 857' right of centerline, 79' AGL/4236' MSL. Elevator 4092' from departure end of runway, 297' right of centerline, 133' AGL/4283' MSL. **Rwy 20,** antenna 523' from departure end of runway, 338' right of centerline, 43' AGL/4217' MSL. **Rwy 24**, tree 630' from departure end of runway, 521' right of centerline, 41' AGL/4215' MSL. Grain elevator 3106' from departure end of runway, 163' left of centerline, 137' AGL/4317' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.
DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading. **All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.
NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .**Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/ 6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 1500-2 or std. with a min. climb of 250' per NM to 6800. **Rwy 22**, 1600-2 or std. with a min. climb of 340' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 4, 22**, turn left. **All aircraft** climb direct COD VOR/DME. Climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above: COD R-350 CW R-170, 6000; or R-171 CW R-349, 11800.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FLD

TAKE-OFF MINIMUMS: **Rwy 5**, CAT A,B, 1700-2 or std. with a min. climb of 230' per NM to 4000. CAT C,D, 2600-2 or std. with a min. climb of 320' per NM to 5400.

DEPARTURE PROCEDURE: **Rwys 1,5**, turn left, climb via COE R-005 to 5400, reverse course, continue climb direct COE VOR. **Rwy 19**, turn right. **Rwy 23,** turn left, climb via COE R-232 to 5000, reverse course, continue climb direct COE VOR.

COLSTRIP, MT

COLSTRIP (M46)

AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 360' per NM to 5600.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading; **Rwy 22,** climbing left turn to heading 130°; **Rwys 4,34,** climbing right turn to heading 210°; **All aircraft** intercept and continue climb via the 170° bearing from DPY NDB to intercept GEG R-006 to GEG VORTAC.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn...**Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)
AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)
ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID

IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.

DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)

FORT LEWIS, WA

. . . . . Rwy 15, 300-1*
Rwy 33, 300-1**

* Or standard with minimum climb of 430/NM to 500.
** Or standard with minimum climb of 380/NM to 600.
Rwy 15 climb runway heading to 700 then climbing left turn direct GR LOM. Rwy 33 climb runway heading direct GR LOM. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GR LOM climb on course. All others continue climb in GR holding pattern (Hold NW, RT, 147° inbound) to cross GR LOM at or above: 071° CW 134° bearing from GR LOM, 8500; 261° CW 329° bearing from GR LOM, 1500.

GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.

NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.

NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT

HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...

...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.

NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,**1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**,1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL**. Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76'AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44'AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58'AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/ 3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30**, 1200-2 or std. with a min. climb of 320' per NM to 1300.

DEPARTURE PROCEDURE: Departure procedure limited to CAT A,B aircraft. **Rwy 30**, climb straight ahead to 1500 then climbing right turn direct LSO NDB. Continue climb in holding pattern (N, right turns, 171° inbound) to cross LSO NDB at or above 3000 direct BTG VORTAC or MEA for route of flight.

KEMMERER, WY

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR

LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY

LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT

LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID

LEWISTON-NEZ PERCE COUNTY

DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT

LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.

DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR

LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT

LIBBY

TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT

MISSION FIELD (LVM)

AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.

DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR

MADRAS MUNI (S33)

ORIG-A 09043 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)

TACOMA, WA 09127

DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787'from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735'from DER, 314' right of centerline 30'AGL/4202' MSL. Road 207'from DER, 254'right of centerline, 15' AGL/4187'MSL.

NEWPORT,OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO,OR

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...
Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...
Rwy 25, climb direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ... **Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L,28R,** climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/88' MSL. **Rwy 28R,** multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)

AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091°CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)

AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)

AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ... ...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100'AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL

DEPARTURE PROCEDURE: Aircraft departing RIW R-280 CW R-170 climb on course. All others climb to 6600, then continue climb direct RIW VOR/DME to cross RIW VOR/DME at or above 7500 before proceeding on course.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY

DEPARTURE PROCEDURE: Climb direct OCS VORTAC. Aircraft departing OCS R-205 CW R-170 climb on course. All others climb in the OCS holding pattern (E, right turns, 260°inbound) to cross OCS VORTAC at or above 7300.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149'left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . . . . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . . . . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD

TAKE-OFF MINIMUMS: **Rwys 3L,3R,** std. w/ min. climb of 400' per NM to 3600, or 1600-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 360' per NM to 3100, or 1600-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3100, or 1600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course. **Rwys 21L, 21R,** climb to 2800, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course.

NOTE: **Rwy 3L,** multiple trees beginning 5000' from departure end of runway, 530' left of centerline, up to 104' AGL/2513' MSL. Tree 1854' from departure end of runway, 773' right of centerline, 54' AGL/2030' MSL, tree 2365' from departure end of runway, 798' right of centerline, 61' AGL/2037' MSL. **Rwy 3R,** multiple trees beginning 5016' from departure end of runway, 1033' left of centerline, up to 104' AGL/2529' MSL, pole 2.5 NM from departure end of runway, 2059' left of centerline, 62' AGL/2454' MSL, hangar 92' from departure end of runway, 341' right of centerline, 5' AGL/1967' MSL, NDB 925' from departure end of runway, 270' right of centerline, 25' AGL/1987' MSL, multiple trees beginning 1870' from departure end of runway, 271' right of centerline, up to 128' AGL/3560' MSL. **Rwy 21L,** pole 316' from departure end of runway, 302' left of centerline, 33' AGL/1992' MSL, tree 926' from departure end of runway, 362' left of centerline, 50' AGL/2006' MSL, building 1057' from departure end of runway, 158' left of centerline, 19' AGL/1975' MSL, building 1061' from departure end of runway, 110' left of centerline, 19' AGL/1975' MSL. Elevator 4080' from departure end of runway, 598' left of centerline, 134' AGL/2080' MSL. **Rwy 21R,** hangar 204' from departure end of runway, 496' left of centerline, 13' AGL/1969' MSL, pole 659' from departure end of runway, 404' left of centerline, 26' AGL/1979' MSL, building, 946' from departure end of runway, 230' left of centerline, 24' AGL/1973' MSL, pole 1399' from departure end of runway, 2' left of centerline, 33' AGL/1982' MSL, elevator 2655' from departure end of runway, 1097' left of centerline, 134' AGL/2080' MSL, tree 189' from departure end of runway, 511' right of centerline, 46' AGL/1979' MSL, tree 480' from departure end of runway, 404' right of centerline, 43' AGL/1979' MSL, pole 1252' from departure end of runway, 55' right of centerline, 29' AGL/1975' MSL, pole 1427' from departure end of runway, 13' right of centerline, 33' AGL/1982' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A,B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C,D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .**Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course ...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E,right turns,253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD

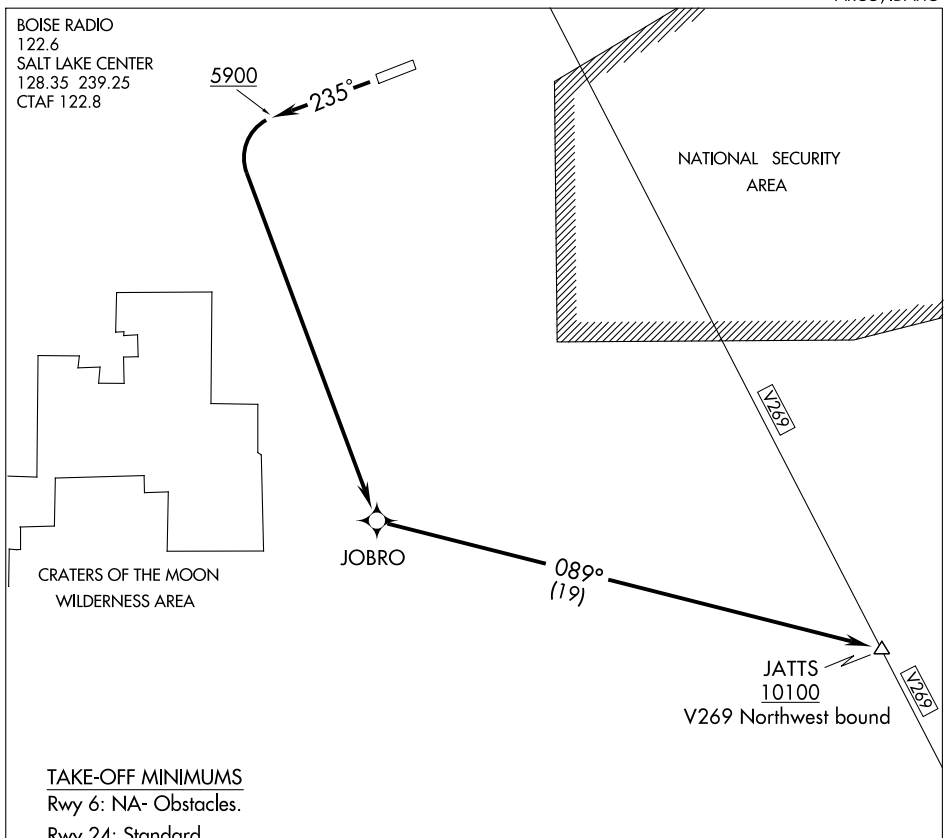
TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

(JATTS1.JATTS) 09239 SL-9198 (FAA)

JATTS ONE DEPARTURE (RNAV) (OBSTACLE)

ARCO-BUTTE COUNTY (AOC)
ARCO, IDAHO



TAKE-OFF MINIMUMS
Rwy 6: NA- Obstacles.
Rwy 24: Standard.

TAKE-OFF OBSTACLE NOTE
Rwy 24, numerous vehicles beginning 641' from DER, 629' right of centerline, 17' AGL/5355' MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24: Climb heading 235° to 5900 then climbing left turn direct JOBRO, then via 089° track to JATTS before proceeding on course.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS		
323°	Rwy Idg	N/A
	TDZE	N/A
	Apt Elev	5332

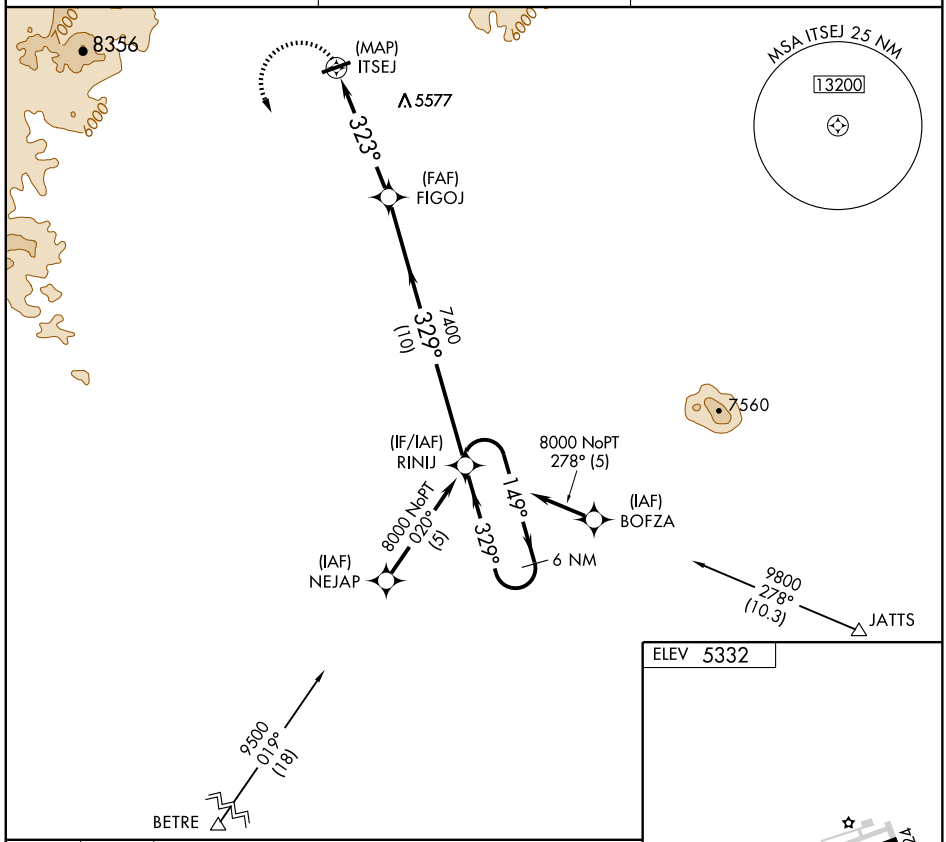
RNAV (GPS)-A
ARCO-BUTTE COUNTY (AOC)

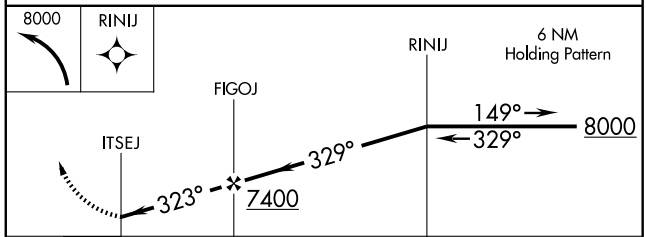
T
A NA

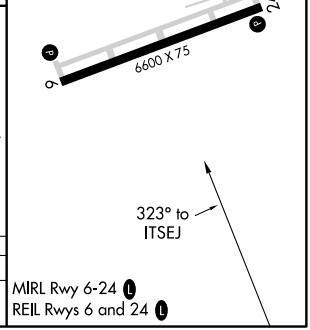
GPS or RNP- 0.3 required.
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Pocatello Rgnl altimeter setting and increase all MDAs 600 feet.

MISSED APPROACH: Climbing left turn to 8000 direct RINIJ and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
135.425	128.35 239.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5920-1 588 (600-1)		5920-1½ 588 (600-1½)	5920-2 588 (600-2)

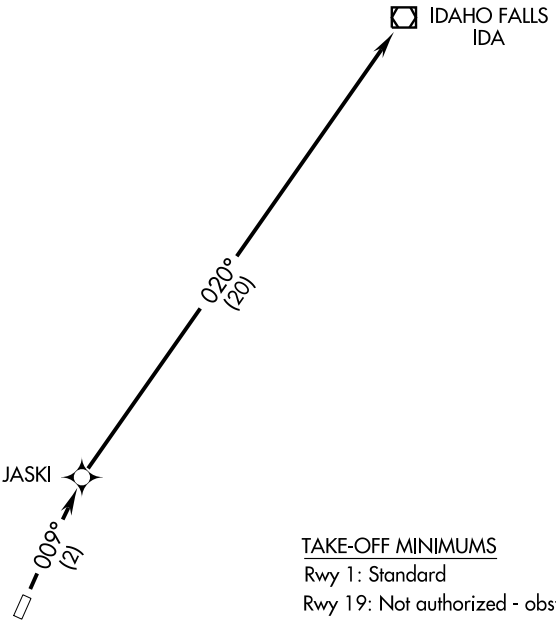
MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

NW-1, 14 JAN 2010 to 11 FEB 2010

IDAHO FALLS ONE DEPARTURE (RNAV)

BLACKFOOT/MCCARLEY FIELD (U02)
BLACKFOOT, IDAHO

SALT LAKE CITY CENTER
128.35 239.25
UNICOM 122.8 (CTAF)



TAKE-OFF MINIMUMS
Rwy 1: Standard
Rwy 19: Not authorized - obstacles.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Climb to 7000 (or higher assigned alttitude) via 009° course to JASKI WP and right turn via 020° course to IDA VOR/DME, then via (assigned route).

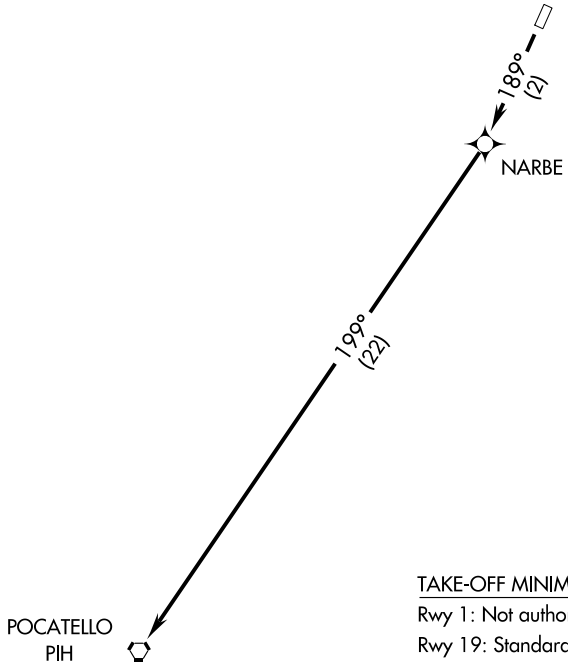
TAKE-OFF RUNWAY 19: Not authorized.

NW-1, 14 JAN 2010 to 11 FEB 2010

POCATELLO ONE DEPARTURE (RNAV)

BLACKFOOT/MCCARLEY FIELD (U∅2)
BLACKFOOT, IDAHO

SALT LAKE CITY CENTER
128.35 239.25
UNICOM 122.8 (CTAF)



TAKE-OFF MINIMUMS
Rwy 1: Not authorized - obstacles
Rwy 19: Standard

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Not authorized.

TAKE-OFF RUNWAY 19: Climb to 7000 (or higher assigned alttitude) via 189° course to NARBE WP and right turn via 199° course to PIH VORTAC, then via (assigned route).

NW-1, 14 JAN 2010 to 11 FEB 2010

BLACKFOOT, IDAHO

AL-9351 (FAA)

RNAV (GPS)-A

BLACKFOOT/MCCARLEY FIELD (U∅2)

APP CRS	Rwy Idg	N/A
189°	TDZE	N/A
	Apt Elev	4488

Use Pocatello Rgnl altimeter setting, when not received use Idaho Falls Rgnl altimeter setting.
DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climb to 8500 direct NARBE and via 199° track to PIH VORTAC and hold.

SALT LAKE CITY CENTER	UNICOM
128.35 239.25	122.8 (CTAF)

Holding not required for arrivals at IDA VOR/DME via V21-365 southbound.

7 NM
015°
195°
(IAF)
IDAHO FALLS
IDA
6778
7000
210°
(11)
(IF)
AMXOJ
6200
189°
(6.2)
4667±
(FAF)
YILKO
MSA RW19 25 NM
10500
4683
RW19
4779
4740
NARBE
4789
199°
6399

MISSED APCH FIX
POCATELLO
PIH
7 NM
201°
021°

ELEV 4488
189° to RW19
4314 X 75

8500 | NARBE | 199° track | PIH

AMXOJ
7000
YILKO
189°
RW19
6200
3.05°
TCH 37
Procedure Turn NA
5.2 NM
6.2 NM

CATEGORY	A	B	C	D
CIRCLING	5340-1 852 (900-1)	5340-1¼ 852 (900-1¼)	5340-2½ 852 (900-2½)	5380-3 892 (900-3)

MIRL Rwy 1-19

NW-1, 14 JAN 2010 to 11 FEB 2010

BLACKFOOT, IDAHO

AL-9351 (FAA)

RNAV (GPS)-B

BLACKFOOT/MCCARLEY FIELD (U02)

APP CRS	Rwy Idg	N/A
009°	TDZE	N/A
	Apt Elev	4488

Use Pocatello Rgnl altimeter setting, when not received use Idaho Falls Rgnl altimeter setting.
DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climb to 7000 direct JASKI and via 020° track to IDA VOR/DME and hold.

SALT LAKE CITY CENTER	UNICOM
128.35 239.25	122.8 (CTAF)

MSA RW01 25 NM
10500

MISSED APCH FIX
7 NM
015°
195°
IDAHO FALLS
IDA

020°
JASKI
4683
RW01
4779
4740
009°
4789
(FAF)
OHJOJ
4936 ±
6200
021°
(6.9)
(IF)
MILMK
6655
6399
6429
6861
7000
021°
(12)
HOLD 8500
201°
021°
7 NM
(IAF)
POCATELLO
PIH
6791

Holding not required for arrivals at PIH VORTAC via V21-257 northbound.

ELEV 4488
6l
4314 X 75
009° to RW01
MIRL Rwy 1-19

7000	JASKI	020° track	IDA

MILMK
7000
021°
OHJOJ
3.05°
TCH 40
6200
009°
RW01
Procedure Turn NA
6.9 NM
5.2 NM

CATEGORY	A	B	C	D
CIRCLING	5380-1¼ 892 (900-1¼)		5380-2¾ 892 (900-2¾)	5380-3 892 (900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

BLACKFOOT, IDAHO

AL-9351 (FAA)

VOR/DME-C

BLACKFOOT/MCCARLEY FIELD (U02)

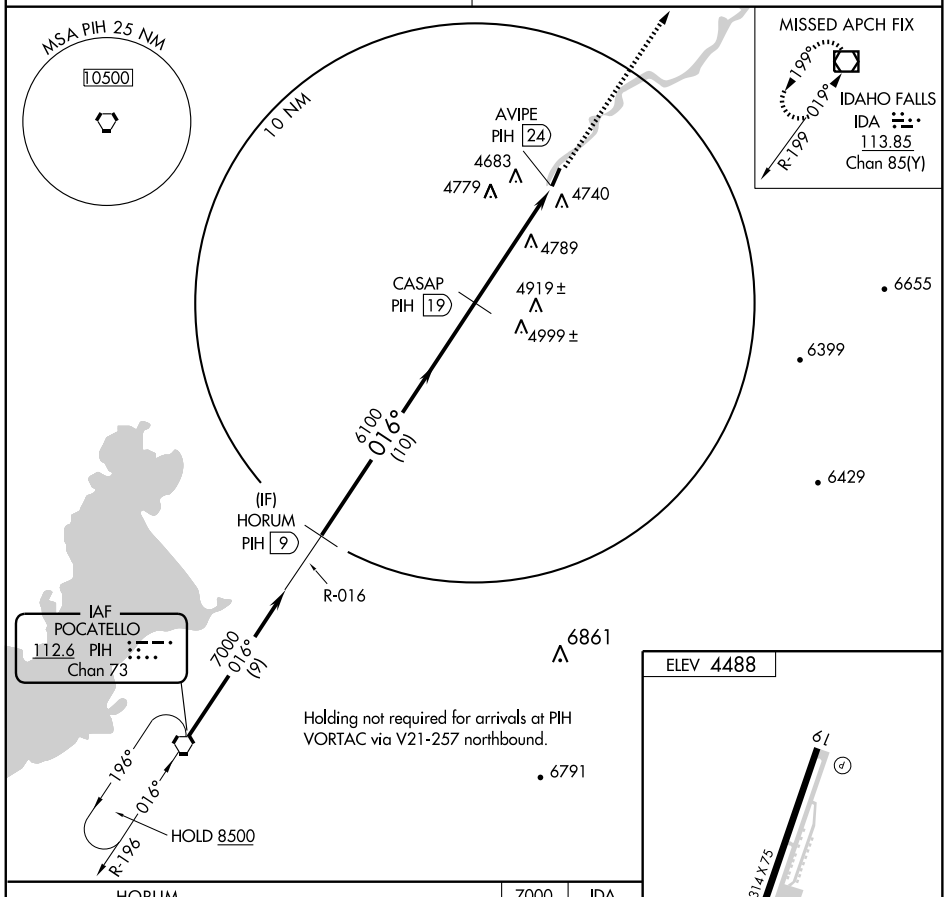
VORTAC PIH	APP CRS	Rwy Idg	N/A
112.6	016°	TDZE	N/A
Chan 73		Apt Elev	4488

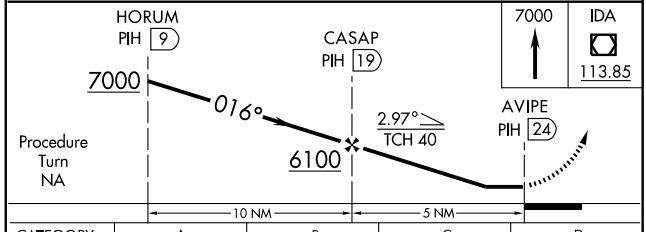
T
A NA

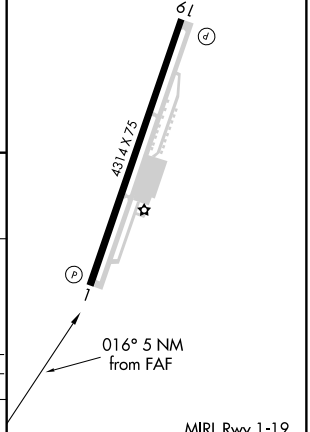
Use Pocatello Rgnl altimeter setting, when not received use Idaho Falls Rgnl altimeter setting.

MISSED APPROACH: Climb to 7000 direct IDA VOR/DME and hold.

SALT LAKE CITY CENTER	UNICOM
128.35 239.25	122.8 (CTAF)



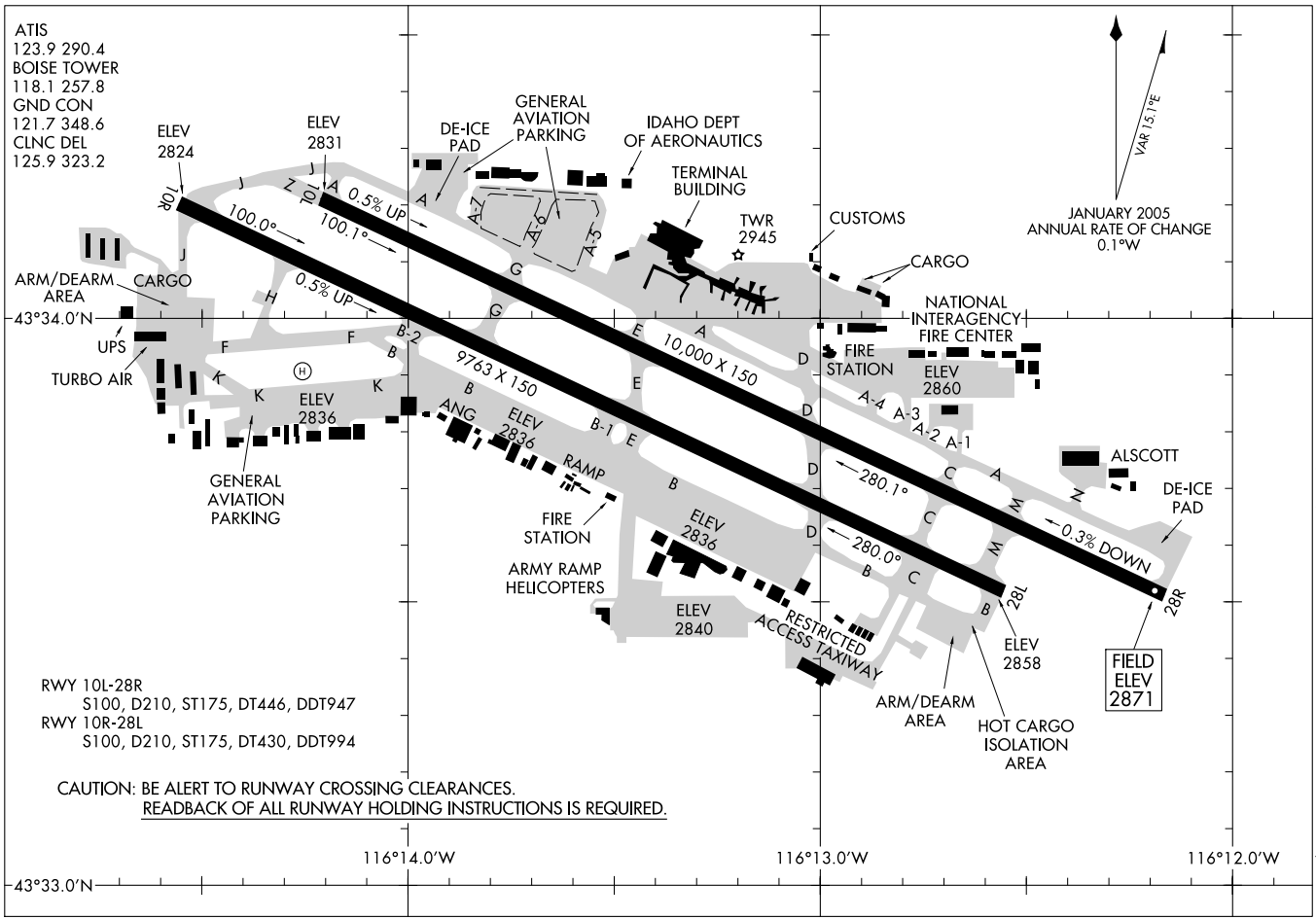




CATEGORY	A	B	C	D
CIRCLING	5460-1¼ 972 (1000-1¼)	5460-1½ 972 (1000-1½)	5460-3 972 (1000-3)	

MIRL Rwy 1-19

NW-1, 14 JAN 2010 to 11 FEB 2010



AIRPORT DIAGRAM

AL-57 (FAA)

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

BOISE, IDAHO

HI-ILS RWY 10R

LOC I-BOI 111.1	APCH CRS 098°	Rwy ldg 9763 TDZE 2833 Arpt Elev 2871

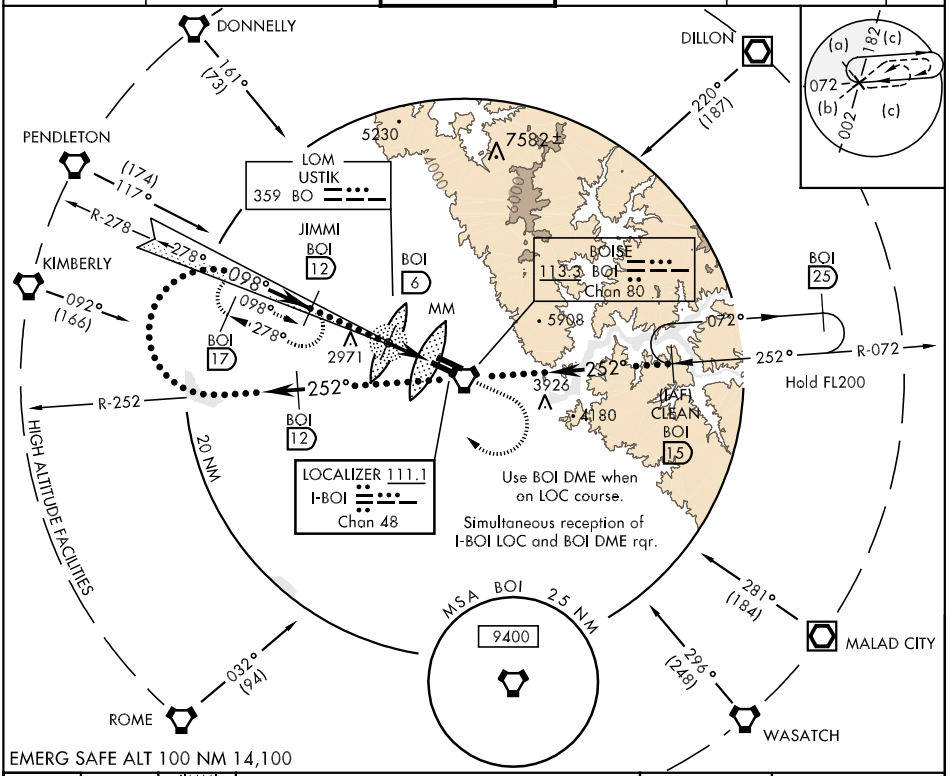
JAL-57 [USAF] BOISE AIR TERMINAL (GOWEN FLD) (KBOI)

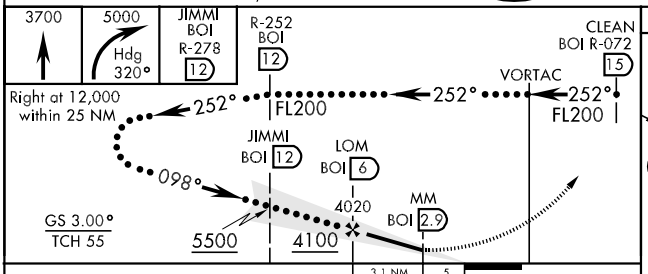
* When ALS inop, increase RVR to 40.
** When ALS inop, increase RVR to 50.
*** Circling N of Rwy 10L-28R NA.

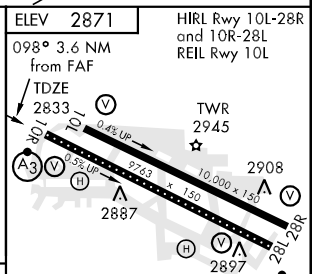
SSALR A3

MISSED APPROACH: Climb to 3700 then climbing right turn to 5000 via heading 320° to intercept BOI VORTAC R-278 then direct JIMMI INT and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL	ASOS
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2	







CATEGORY	C	D	E
S-ILS 10R *	3033/18 200 (200-½)		3033/24 200 (200-½)
S-LOC 10R **	3120/24 287 (300-½)	3120/40 287 (300-¾)	
CIRCLING ***	3320-1½ 452 (500-1½)	3420-2 552 (600-2)	3680-3 812 (900-3)

FAF to MAP 3.6 NM

Knots	120	140	160	180	200
Min:Sec	1:48	1:33	1:21	1:12	1:05

HI-VOR/DME or TACAN RWY 10R

VORTAC BOI	APCH CRS	Rwy ldg 9763
113.3	098°	TDZE 2833
Chan 80		Arpt Elev 2871

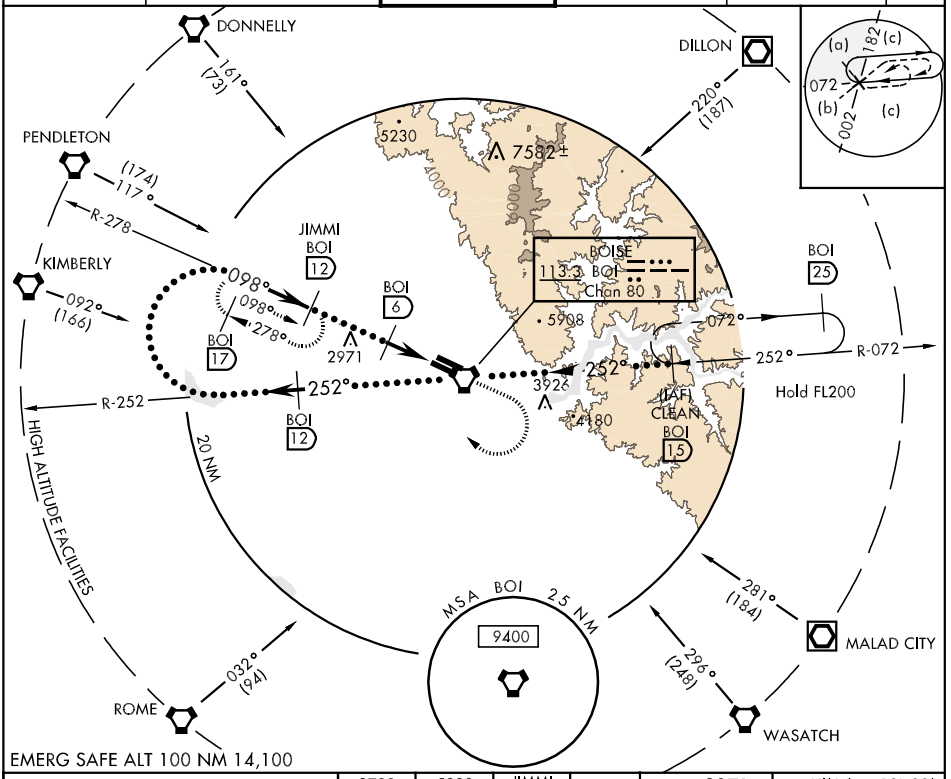
JAL-57 [USAF] BOISE AIR TERMINAL (GOWEN FLD) (KBOI)

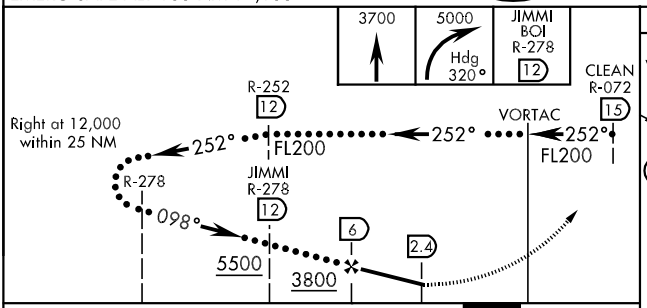
T * When ALS inop, increase CAT C RVR to 50 and CAT E RVR to 60.
** Circling N of Rwy 10L-28R NA.

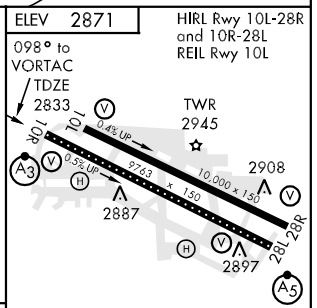
SSALR A3

MISSED APPROACH: Climb to 3700 then climbing right turn to 5000 via heading 320° to intercept BOI VORTAC R-278 then direct JIMMI INT and hold

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL	ASOS
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2	







CATEGORY	C	D	E
S-10R *	3160/24 327 (400-½)	3160/50 327 (400-1)	
CIRCLING **	3320-1½ 452 (500-1½)	3420-2 552 (600-2)	3680-3 812(900-3)

TDZ/CL Rwy 10R-28L

HI-VOR/DME or TACAN RWY 10R

HI-VOR/DME or TACAN RWY 28L

VORTAC BOI 113.3 Chan 80	APCH CRS 278°	Rwy ldg 9763 TDZE 2855 Arpt Elev 2871

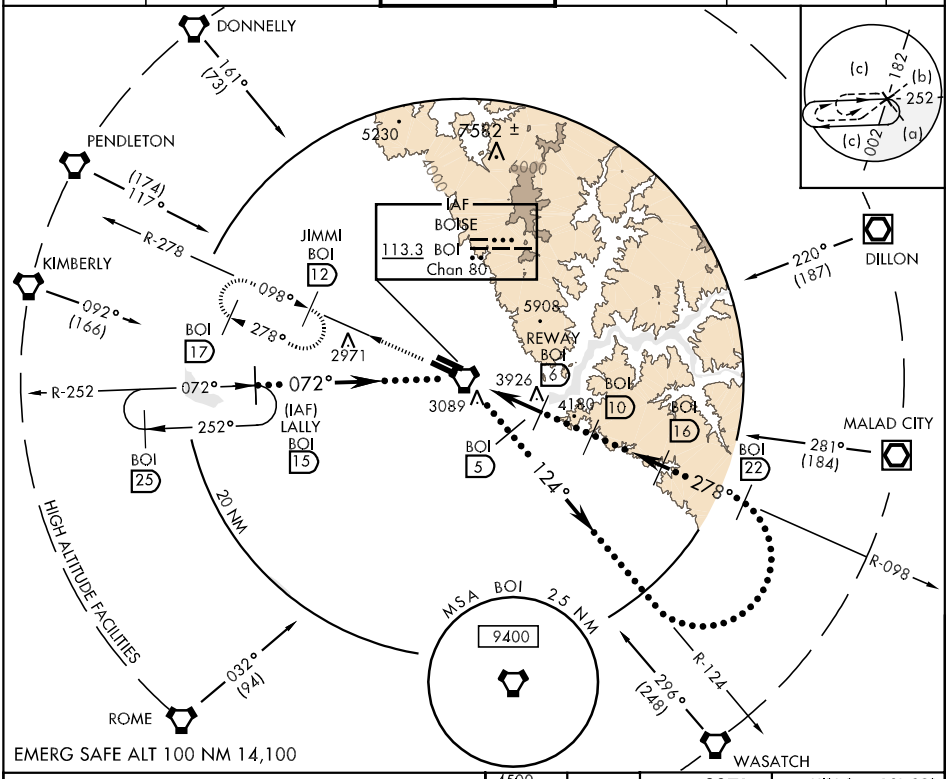
JAL-57 [USAF] BOISE AIR TERMINAL (GOWEN FLD) (KBOI)

* When ALS inop, increase vis ½ mile.
** Circling N of Rwy 10L-28R NA.

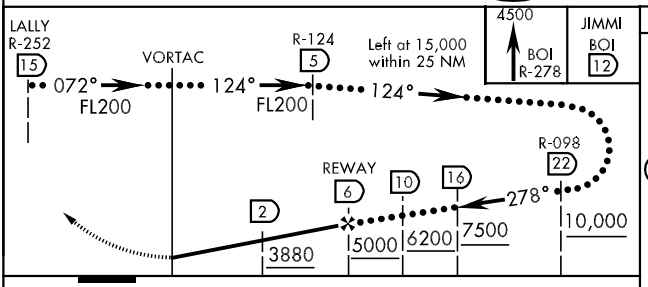
MALSR A5

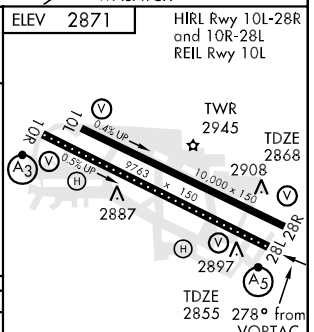
MISSED APPROACH: Climb to 4500 via BOI VORTAC R-278 to JIMMI and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL	ASOS
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2	



EMERG SAFE ALT 100 NM 14,100





CATEGORY	C	D	E
S-28L *	3360/50 505 (500-1)		3360/60 505 (500-1¼)
SIDESTEP RWY 28R	3360-1¾ 492 (500-1¾)	3360-2¼ 492 (500-2¼)	
CIRCLING **	3360-1½ 492 (500-1½)	3420-2 552 (600-2)	3680-3 812 (900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

BOISE, IDAHO AL-57 (FAA)

LOC/DME I-BOI	APP CRS	Rwy Idg 10R	TDZE	Apt Elev	Rwy Idg 10L	TDZE	Apt Elev
111.1 Chan 48	100°	9763	2836	2871	10000	2844	2871

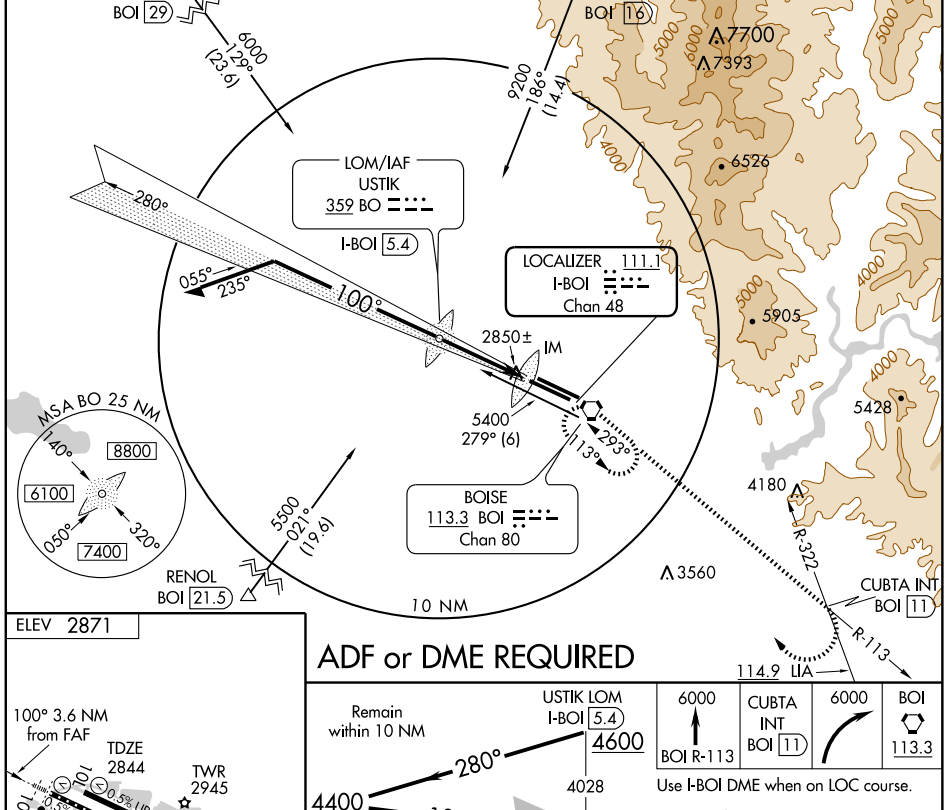
ILS or LOC RWY 10R
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

For inoperative MALSR, increase S-LOC 10R Cat. D visibility to RVR 5000.
Circling NA north of Rwy 10L-28R.
Visibility reduction by helicopters NA for sidestep.

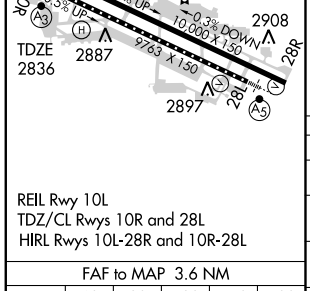
SSALR (A3)

MISSED APPROACH: Climb to 6000 via BOI VORTAC R-113 to CUBTA INT/BOI 11 DME, and continue climbing right turn to 6000 direct BOI VORTAC and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



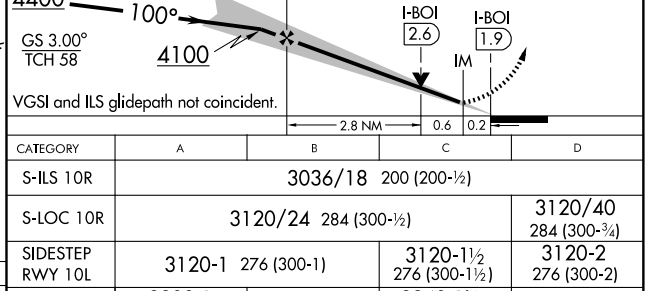
ELEV 2871



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 10R	3036/18 200 (200-½)			
S-LOC 10R	3120/24 284 (300-½)			3120/40 284 (300-¾)
SIDESTEP RWY 10L	3120-1 276 (300-1)		3120-1½ 276 (300-1½)	3120-2 276 (300-2)
CIRCLING	3300-1 429 (500-1)	3340-1 469 (500-1)	3340-1½ 469 (500-1½)	3440-2 569 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BOI	APP CRS	Rwy Idg	9763
111.1	100°	TDZE	2836
Chan 48		Apt Elev	2871

ILS RWY 10R (CAT II)

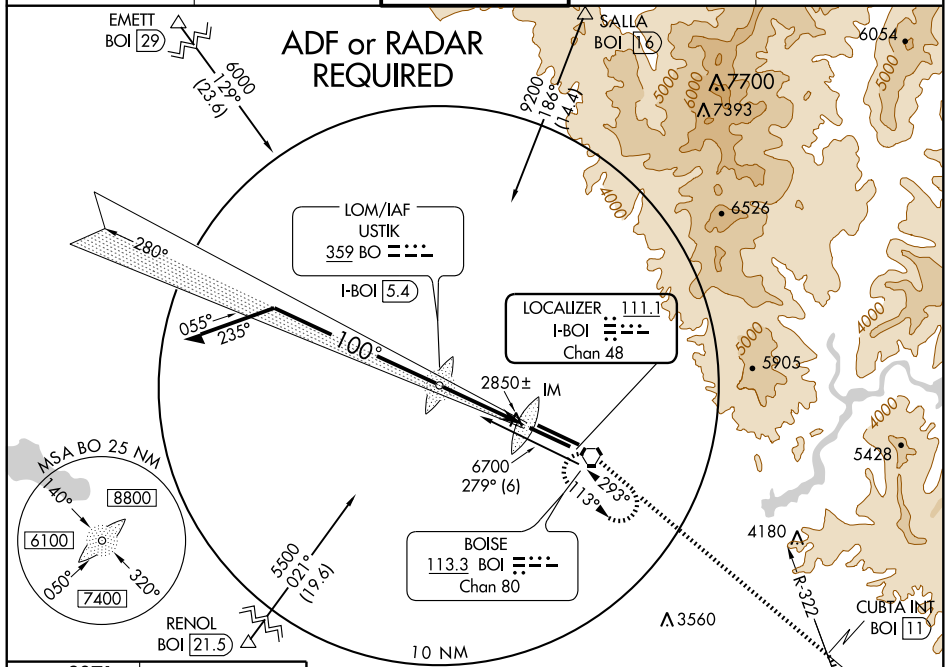
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

Circling NA north of Rwy 10L-28R. Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSSPEC approval or LOA for this runway.

SSALR

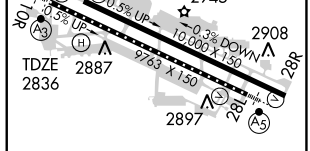
MISSED APPROACH: Climb to 6000 via BOI VORTAC R-113 to CUBTA INT/BOI 11 DME, and continue climbing right turn to 6000 direct BOI VORTAC and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

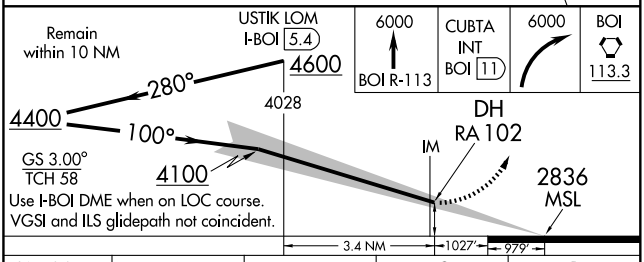


CAUTION: CAT II missed approach obstacle, 2895 MSL light, 5228' from threshold, 814' right of centerline.

ELEV 2871



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L



CATEGORY	A	B	C	D
S-ILS 10R	RA 102/12 100 DA 2936			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BOI	APP CRS	Rwy Idg	9763
111.1	280°	TDZE	2858
Chan 48		Apt Elev	2871

LOC BC RWY 28L

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

For inoperative MALSR, increase S-28L Cat. E visibility to 1½.
Circling NA north of Rwy 10L-28R.
DME or RADAR required.

MALSR

MISSED APPROACH: Climb to 4500 via BOI VORTAC R-278 to JIMMI/12 DME/RADAR and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

RADAR REQUIRED

JIMMI
BOI 12
RADAR

098°
278°
R-278

BOISE
113.3 BOI
Chan 80

Maximum holding airspeed 230 KIAS.

LOCALIZER 111.1
I-BOI
Chan 48

JUXID
I-BOI 0.5
RADAR

OYIGA
I-BOI 1.7
RADAR

WEXAK
I-BOI 6.2
RADAR

ZESNA
I-BOI 9.7
RADAR

(IF)
VEVUC
I-BOI 15.1
RADAR

(IAF)
IYECO
I-BOI 20
RADAR

3015±
3113±
3709±
4180
5300
280° (3.6)
3560
6300
280°
(5.3)
6900
280°
(4.9)
100°
5360

MSA BOI 25 NM
130°
9500
6600
300°

10 NM

6526
6336
5905
5428
7550

ELEV 2871

BACK COURSE

4500
BOI R-278

JIMMI
BOI 12
RADAR

Use I-BOI DME when on LOC course.
VGSI and descent angles not coincident.
Disregard glideslope indications.

I-BOI DME ANTENNA
JUXID I-BOI 0.5 RADAR
OYIGA I-BOI 1.7 RADAR
WEXAK I-BOI 6.2 RADAR
ZESNA I-BOI 9.7 RADAR
VEVUC I-BOI 15.1 RADAR

3.49°
TCH 50

3640
5300
6300
6900
280°

Procedure Turn NA

0.8 | 1.2 NM | 4.5 NM | 3.6 NM | 5.3 NM

TWR
2945

0.5% UP
0.3% DOWN
10,000 X 150
9763 X 150
2908
2887
2897
TDZE
2858
10L
10R
28L
28R
280° 6.5 NM from FAF

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

CATEGORY	A	B	C	D	E
S-28L	3300/24	442 (500-½)	3300/40 442 (500-¾)	3300/50	442 (500-1)
CIRCLING	3300-1 429 (500-1)	3340-1 469 (500-1)	3340-1½ 469 (500-1½)	3440-2 569 (600-2)	3740-3 869 (900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

BO NDB	APP CRS	Rwy Idg	9763
359	102°	TDZE	2836
		Apt Elev	2871

NDB RWY 10R

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

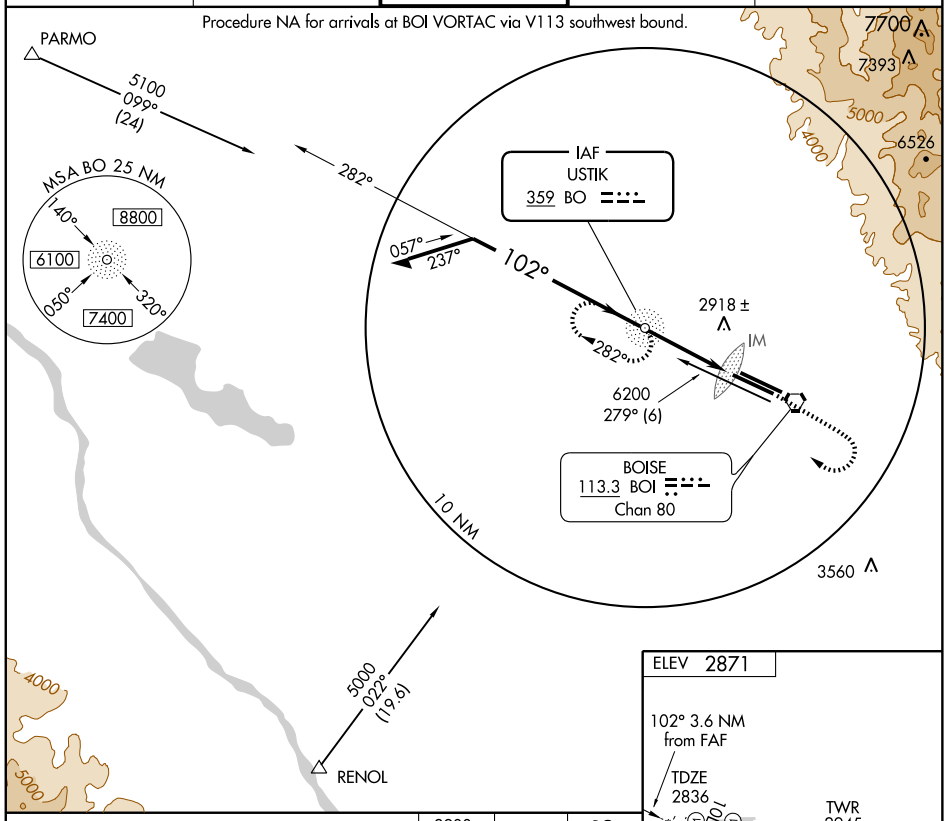
For inoperative MALSR, increase S-10R Cat C visibility to RVR 5000.
Circling NA north of Rwy 10L-28R.

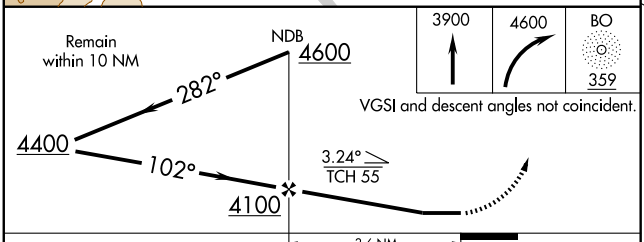
SSALR

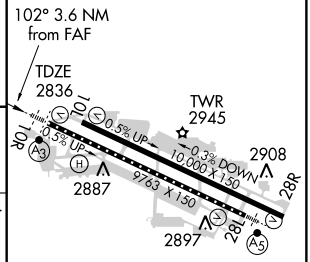
MISSED APPROACH: Climb to 3900 then climbing right turn to 4600 direct BO NDB and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

Procedure NA for arrivals at BOI VORTAC via V113 southwest bound.







REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

CATEGORY	A	B	C	D
S-10R	3220/40 384 (400-¾)			3220/50 384 (400-1)
CIRCLING	3300-1 429 (500-1)	3340-1 469 (500-1)	3340-1½ 469 (500-1½)	3440-2 569 (600-2)

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	10000
CH 78102	100°	TDZE	2844
W10A		Apt Elev	2871

RNAV (GPS) Y RWY 10L

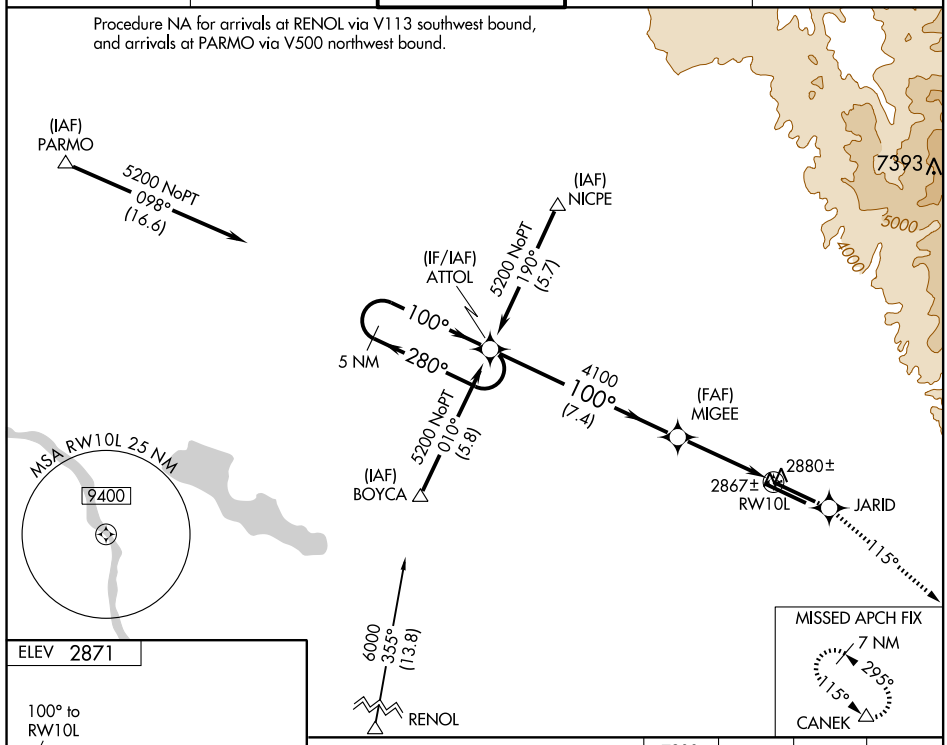
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

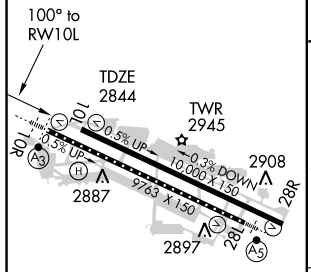
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 42°C (108°F).
Circling NA north of Rwys 10L and 28R. DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.

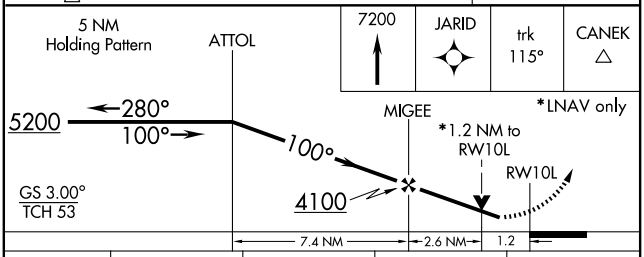
MISSED APPROACH: Climb to 7200 direct JARID and via track 115° to CANEK and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

Procedure NA for arrivals at RENOL via V113 southwest bound, and arrivals at PARMO via V500 northwest bound.







CATEGORY	A	B	C	D
LPV DA	3094-1 250 (300-1)			
LNAV/VNAV DA	3173-1¼ 329 (400-1¼)			
LNAV MDA	3280-1 436 (500-1)		3280-1¼ 436 (500-1¼)	3280-1½ 436 (500-1½)
CIRCLING	3440-1 569 (600-1)		3440-1½ 569 (600-1½)	3440-2 569 (600-2)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9763
CH 40203	100°	TDZE	2836
W10B		Apt Elev	2871

RNAV (GPS) Y RWY 10R

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

For inoperative SSALR, increase LNAV Cat. D visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 42°C (107°F).
Circling NA north of Rwys 10L and 28R.
DME/DME RNP- 0.3 NA.

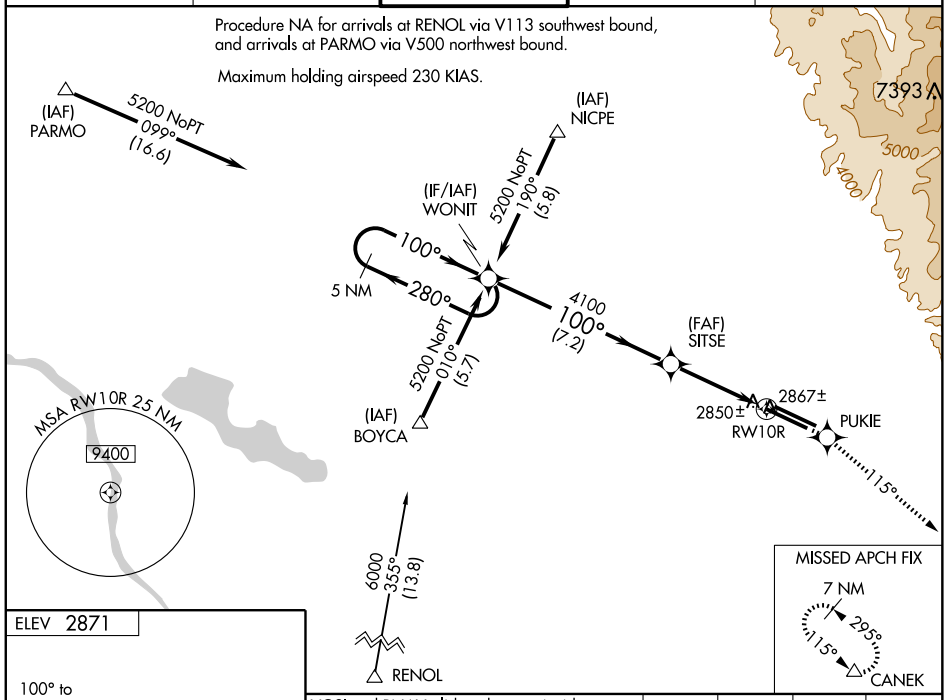
SSALR

MISSED APPROACH: Climb to 7200 direct PUKIE and via track 115° to CANEK and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

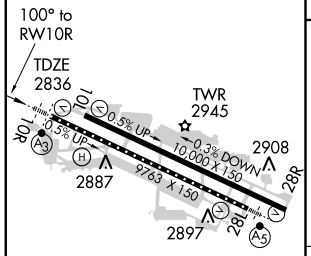
Procedure NA for arrivals at RENOL via V113 southwest bound, and arrivals at PARMO via V500 northwest bound.

Maximum holding airspeed 230 KIAS.



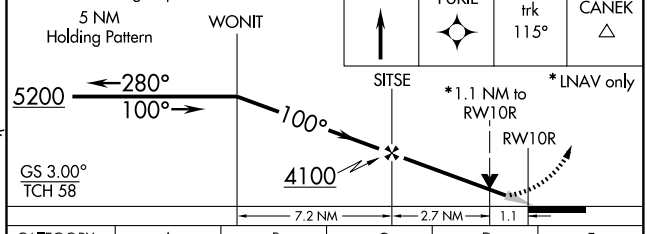
MISSED APCH FIX
7 NM
295°
115°
CANEK

ELEV 2871



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D	E
LPV DA	3086/24 250 (300-½)				
LNAV/VNAV DA	3189/40 353 (400-¾)				
LNAV MDA	3240/24 404 (400-½)		3240/40 404 (400-¾)	3240/50 404 (400-1)	
CIRCLING	3440-1 569 (600-1)		3440-1½ 569 (600-1½)	3440-2 569 (600-2)	3860-3 989 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9763
CH 77702	280°	TDZE	2858
W28A		Apt Elev	2871

RNAV (GPS) Y RWY 28L

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

Circling NA north of Rwy 10L-28R. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LPV visibility to RVR 5000 all Cats, LNAV/VNAV Cat E to 1½, and LNAV Cat E to 2¼.

MALSR

MISSED APPROACH: Climb to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

Maximum holding airspeed 230 KIAS.

JIMMI 100° 280° 5 NM

6526 6336 5905 5428

RW28L 3136± 2993± 3113± DUTME 4.2 NM to RW28L

(FAF) AYDOK 4122± 4180 3559± 280°

5500 280° (2.4) EVAKE (3.6)

(IF) NESLE 6200 280°

(IAF) GONSE 6800 281° (4.9) 5360

3560

MSA RW28L 25 NM 9400

7800 341° (6.5) CANEK

Procedure NA for arrivals at CANEK via V4-253-330 southeast bound.

ELEV 2871

TWR 2945 2908 2887 2897 TDZE 2858 280° to RW28L

10R 28R 28L 9763 X 150 10,000 X 150 0.5% UP 0.3% DOWN 0.3% UP

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

6000 JIMMI *LNAV only *1.8 NM to RW28L DUTME 4.2 NM to RW28L RW28L AYDOK EVAKE NESLE 280° 4260* 5500 6200 6800 Procedure Turn NA GS 3.00° TCH 50

1.8 NM 2.4 NM 3.8 NM 2.4 NM 3.6 NM

CATEGORY	A	B	C	D	E
LPV DA	3183/24 325 (400-½)				
LNAV/VNAV DA	3274/50 416 (500-1)				
LNAV MDA	3480/24 622 (700-½)		3480/60 622 (700-1¼)	3480-1½ 622 (700-1½)	3480-1¾ 622 (700-1¾)
CIRCLING	3480-1 609 (700-1)		3480-1¾ 609 (700-1¾)	3480-2 609 (700-2)	3860-3 989 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 65803 W28B	APP CRS 280°	Rwy Idg 10000 TDZE 2871 Apt Elev 2871

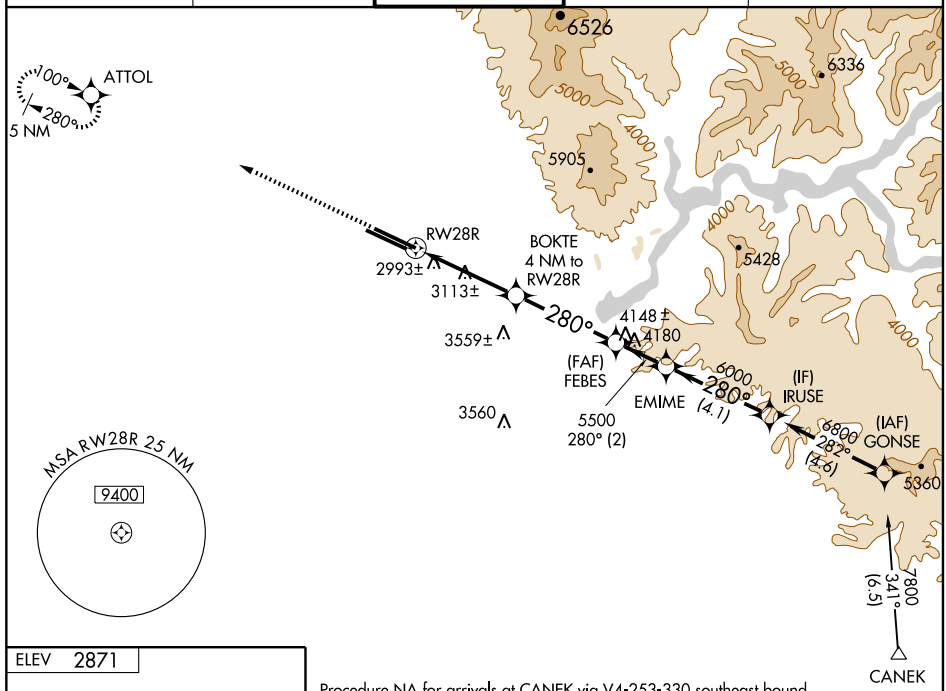
RNAV (GPS) Y RWY 28R

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. Circling NA north of Rwy 10L-28R.

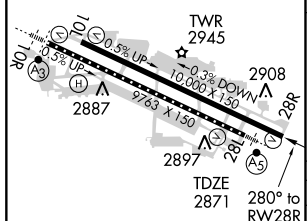
MISSED APPROACH: Climb to 6000 direct ATTOL and hold, continue climb-in-hold to 6000.

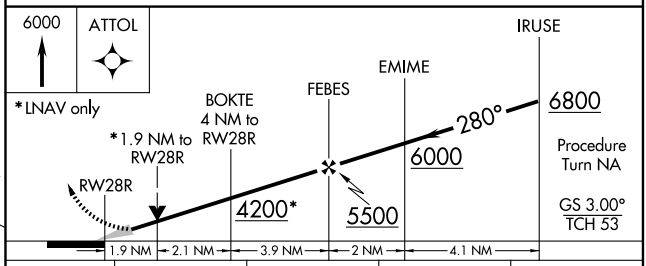
ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



ELEV 2871

Procedure NA for arrivals at CANEK via V4-253-330 southeast bound.





CATEGORY	A	B	C	D
LPV DA	3147/50 276 (300-1)			
LNAV/VNAV DA	3271-1½ 400 (400-1½)			
LNAV MDA	3520/50 649 (700-1)		3520-1¾ 649 (700-1¾)	3520-2 649 (700-2)
CIRCLING	3520-1 649 (700-1)		3520-1¾ 649 (700-1¾)	3520-2 649 (700-2)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	10000
100°	TDZE	2844
	Apt Elev	2871

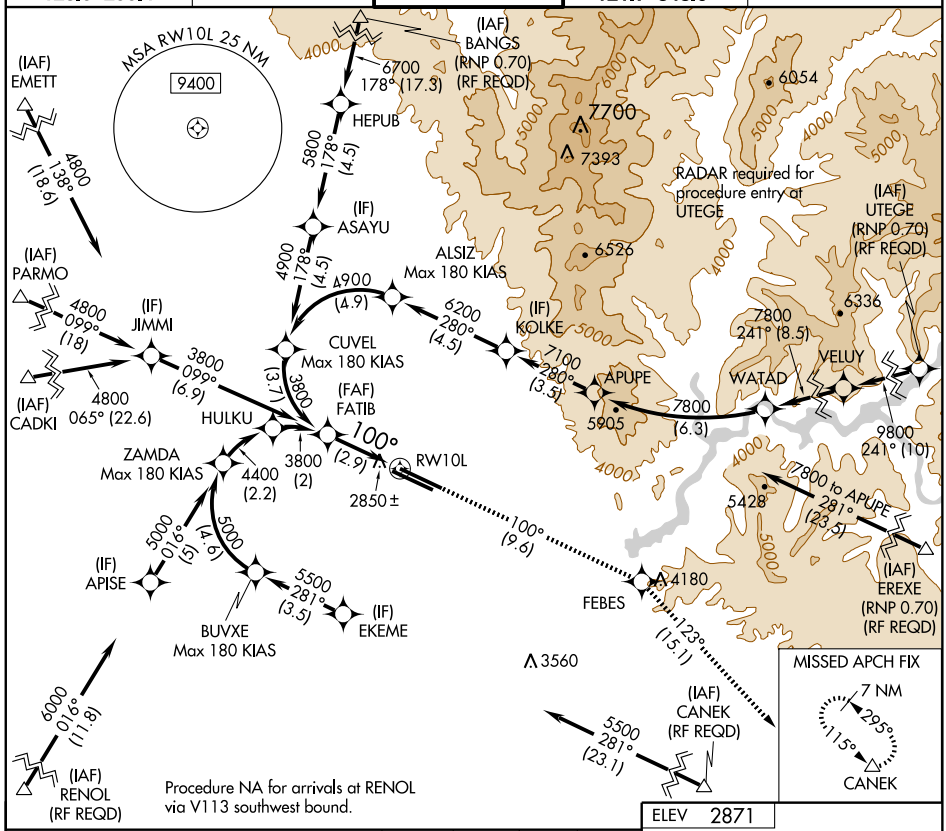
RNAV (RNP) Z RWY 10L

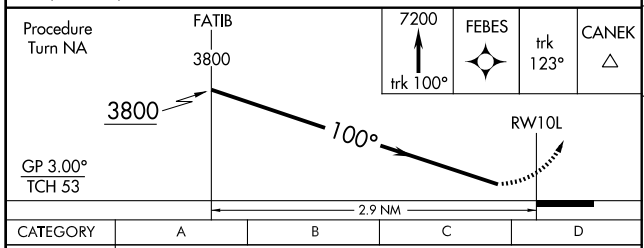
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 41°C (107°F). When VGSI inoperative, procedure NA at night. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 7200 via track 100° to FEBES and via track 123° to CANEK and hold.

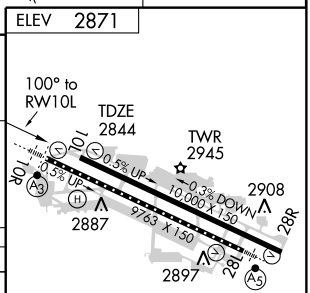
ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2





CATEGORY	A	B	C	D
RNP 0.18 DA	3145-1 301 (300-1)			
RNP 0.30 DA	3175-1¼ 331 (400-1¼)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9763
100°	TDZE	2836
	Apt Elev	2871

RNAV (RNP) Z RWY 10R

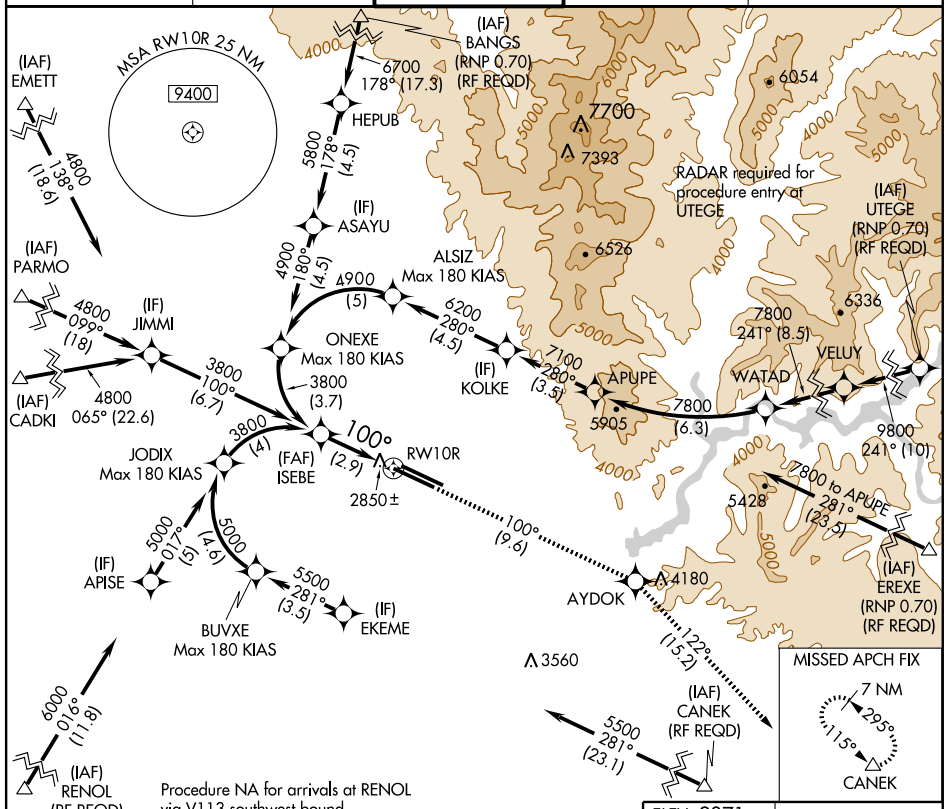
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

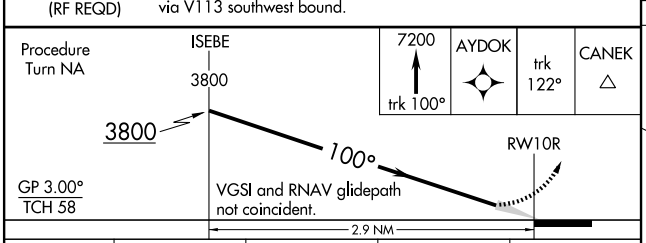
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 42°C (107°F). For inoperative SSALR increase RNP 0.15 and RNP 0.30 visibility all Cats to RVR 5000.

SSALR

MISSED APPROACH: Climb to 7200 via track 100° to AYDOK and via track 122° to CANEK and hold.

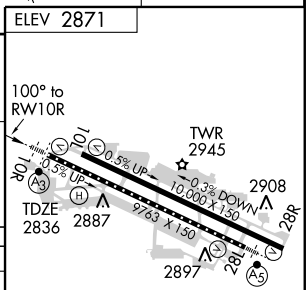
ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2





CATEGORY	A	B	C	D
RNP 0.15 DA	3115/24	279 (300-½)		
RNP 0.30 DA	3151/40	315 (300-¾)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9763
280°	TDZE	2858
	Apt Elev	2871

RNAV (RNP) Z RWY 28L

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 42°C (107°F). For inoperative MALSR increase RNP 0.15 and RNP 0.25 visibility to RVR 6000, and RNP 0.30 to 1½.

MALSR

MISSED APPROACH: Climb to 6000 via track 280° to JIMMI and hold, continue climb-in-hold to 6000.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

MISSED APCH FIX

JIMMI 100° 280° 5 NM

(IAF) EMETT (RNP 0.30) (RF REQD) 8700 104° (24.5)

(IF) JAGHE 8000 104° (5) 6526

(IAF) BANGS (RNP 0.30) (RF REQD) 7700 7393

8900 132° (17.6)

LODZI

7700 165° (8)

(IF) IBECO

7550

QWIST Max 180 KIAS 6800 165° (6)

6336

RADAR required for procedure entry at UTEGE.

CEPAV to HOBSI 3900 276° (1.5) 5905

IDOCY

ICUJY Max 180 KIAS

(IAF) UTEGE (RNP 0.50) (RF REQD) 10300 208° (10.3)

(IAF) PARMO (RNP 0.30) (RF REQD) 280° (11.2)

2913± 3900 280° (1.1)

CEPAV 4200 (0.6)

JADWI 5800 (3.2)

UNCOY 4900 (3.1)

5428

ZABEV 9200 208° (5.5) 5585

RW28L 280° 2993± (3.1)

6000 111° (26.8)

(FAF) HOBSI 3900 (1.4)

4300 (1.9)

ZIZAZ 5000 280° (2)

JUBEN

4180

MUFPI

TAYFI

(IF) HUBAS

5800 100° (6)

6000 084° (27.8)

ZOVAM 4300 (2.7)

CIPSA Max 180 KIAS

5600 280° (4)

(IF) OFTER (7.6) 6800

8000 260° (4)

9200 260° (7)

(IAF) CADKI (RNP 0.30) (RF REQD)

5200 (4.5)

ELUMY Max 180 KIAS

4300 280° (1.2)

4600 280° (1.5)

SAKVY

ROKTY

NEWKU

5360

6800 260° (4)

(IAF) EREXE (RNP 0.50) 6692

3560

5200 008° (4.1)

(IF) DIKAC

MSA RW28L 25 NM 9400

5800 061° (19.5)

(IAF) RENOL (RNP 0.30) (RF REQD)

Procedure NA for arrivals at RENOL via V113 southwest bound.

6800 to OFTER 314° (10.5)

(IAF) CANEK (RNP 0.50)

ELEV 2871

TWR 2945

10L 10R 28R 28L

0.5% UP 0.3% DOWN 10,000 X 150

2908 2887 97/63 X 150 2897 2858

TDZE

280° to RW28L

REIL Rwy 10L

TDZ/CL Rwys 10R and 28L

HIRL Rwys 10L-28R and 10R-28L

6000 trk 280° JIMMI

HOBSI 3900

Procedure Turn NA

RW28L 280° 3900

GP 3.00° TCH 50

3.1 NM

CATEGORY	A	B	C	D
RNP 0.15 DA	3228/40	370 (400-¾)		
RNP 0.25 DA	3250/50	392 (400-1)		
RNP 0.30 DA	3315/60	457 (500-1¼)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	10000
280°	TDZE	2871
	Apt Elev	2871

RNAV (RNP) Z RWY 28R

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 42°C (107°F). Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6000 via track 280° to ATTOL and hold, continue climb-in-hold to 6000.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2

MISSED APCH FIX

ATTOL

5 NM

(IAF) EMETT (RNP 0.30) (RF REQD)

(IF) JAGHE

QWIST Max 180 KIAS

(IF) IBECO

(IAF) BANGS (RNP 0.30) (RF REQD)

LODZI

RADAR required for procedure entry at UTEGE.

(IAF) UTEGE (RNP 0.30) (RF REQD)

ICUJY Max 180 KIAS

(IAF) PARMO (RNP 0.30) (RF REQD)

CEPAV

ZIZAZ

JADWI

JUBEN

ZABEV

TAYFI

(IF) HUBAS

FEGNI

HEGUT Max 180 KIAS

(FAF) HAPNU

RW28R

(IF) OFTER

ROKTY

NEWKU

(IAF) EREXE (RNP 0.30)

(IAF) CADKI (RNP 0.30) (RF REQD)

ELUMY Max 180 KIAS

SAKVY

(IF) DIKAC

MUFPI

MSA RW28R 25 NM

9400

(IAF) RENOL (RNP 0.30) (RF REQD)

Procedure NA for arrivals at RENOL via V113 southwest bound.

(IAF) CANEK (RNP 0.30)

ELEV 2871

TWR 2945

0.5% UP

0.3% DOWN

10,000 X 150

97/63 X 150

2908

2887

2897

TDZE 2871

280° to RW28R

REIL Rwy 10L

TDZ/CL Rwys 10R and 28L

HIRL Rwys 10L-28R and 10R-28L

6000 trk 280°

ATTOL

HAPNU

3900

Procedure Turn NA

RW28R

280°

3900

GP 3.00°

TCH 52

3 NM

CATEGORY	A	B	C	D
RNP 0.15 DA	3204/60	333 (400-1¼)		
RNP 0.30 DA	3304-1½	433 (500-1½)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

BOISE, IDAHO

AL-57 (FAA)

VORTAC BOI	APP CRS	Rwy Idg	10000
113.3	101°	TDZE	2844
Chan 80		Apt Elev	2871

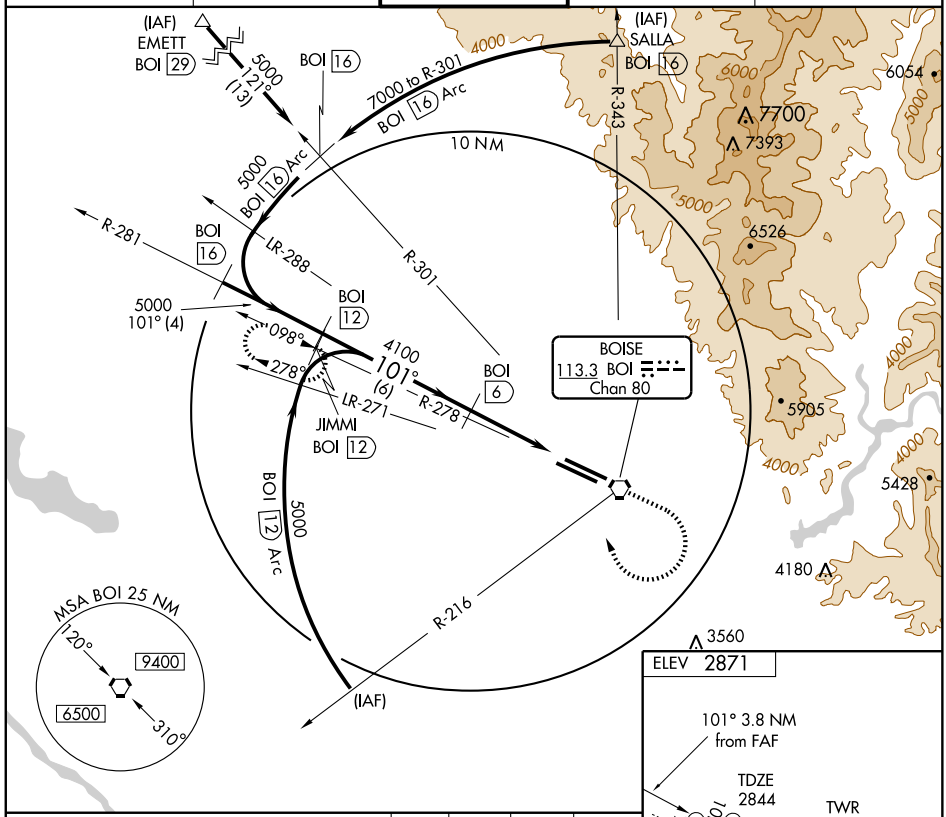
VOR/DME or TACAN RWY 10L

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

Circling not authorized north of Rwy 10L-28R.

MISSED APPROACH: Climb to 3700 then climbing right turn to 5000 via heading 320° and BOI R-278 to JIMMI INT and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



CATEGORY	A	B	C	D	E
S-10L	3180-1		336 (400-1)		3180-1¼ 336 (400-1¼)
CIRCLING	3300-1 429 (500-1)	3340-1 469 (500-1)	3340-1½ 469 (500-1½)	3440-2 569 (600-2)	3740-3 869 (900-3)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

BOISE, IDAHO

AL-57 (FAA)

VOR/DME or TACAN RWY 28L

BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

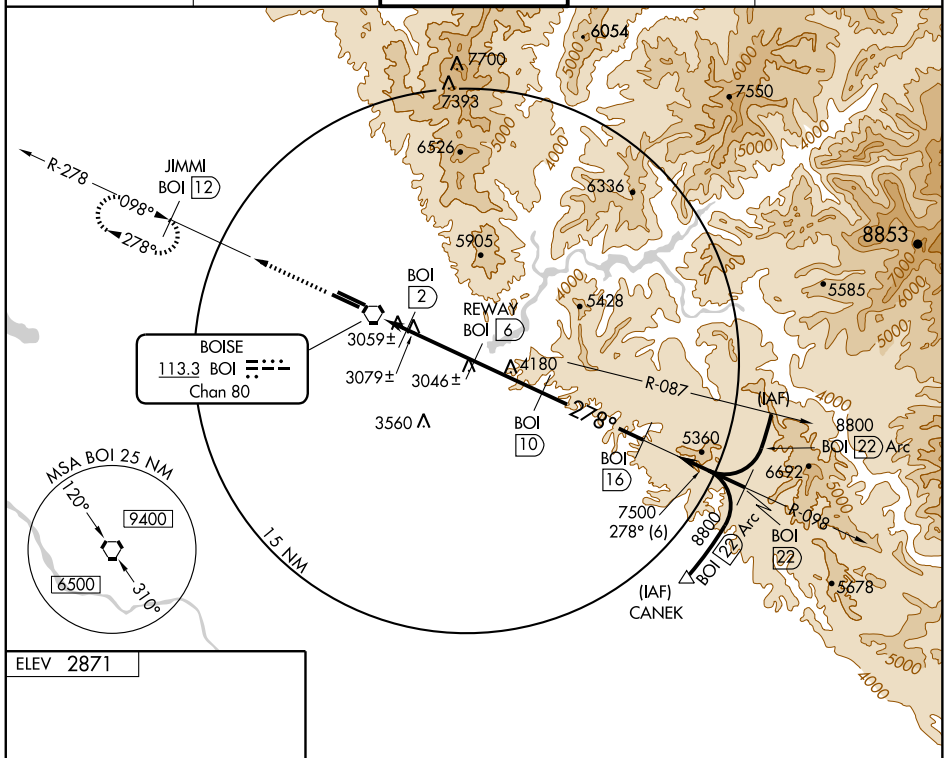
VORTAC BOI 113.3 Chan 80	APP CRS 278°	Rwy Idg 28L 9763 TDZE 2858 Apt Elev 2871	Rwy Idg 28R 10000 TDZE 2871 Apt Elev 2871

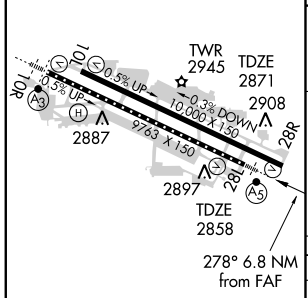
T Circling not authorized north of Rwy 10L-28R.
A For inoperative MALSR increase Cat E visibilities ½ mile.

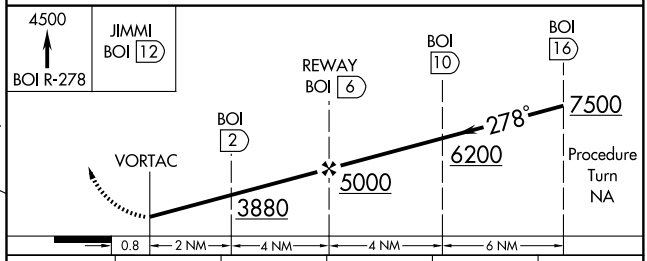
MALSR Rwy 28L (A5)

MISSED APPROACH: Climb to 4500 via BOI R-278 to JIMMI and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2







CATEGORY	A	B	C	D	E
S-28L	3380/24	522 (600-½)	3380/50 522 (600-1)	3380/60	522 (600-1¼)
SIDESTEP RWY 28R	3380/60	509 (600-1¼)	3380-1¾ 509 (600-1¾)	3380-2¼	509 (600-2¼)
CIRCLING	3380-1	509 (600-1)	3380-1½ 509 (600-1½)	3440-2 569 (600-2)	3740-3 869 (900-3)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC BOI	APP CRS	Rwy Idg	9763
113.3	098°	TDZE	2833
Chan 80		Apt Elev	2868

VOR/DME RWY 10R

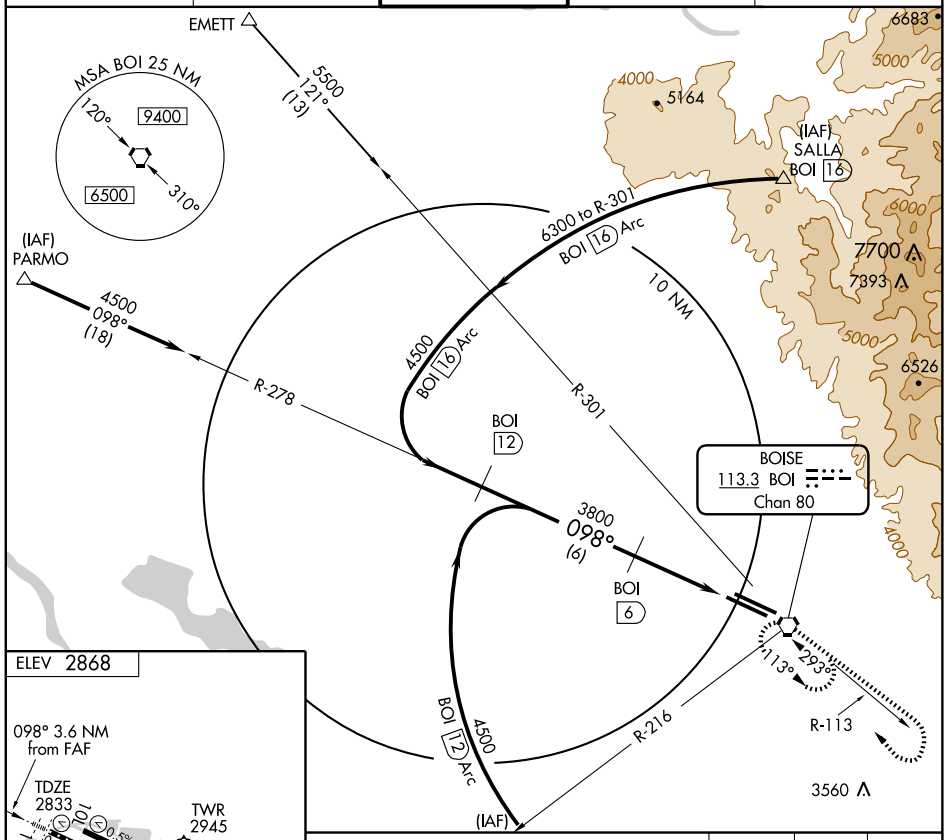
BOISE AIR TERMINAL (GOWEN FIELD) (BOI)

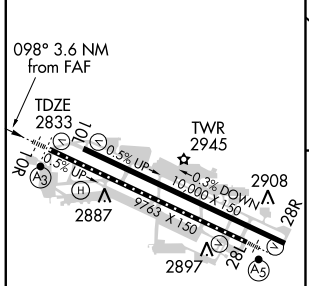
Inoperative table does not apply to Cat D.
Circling not authorized north of Rwy 10L-28R.

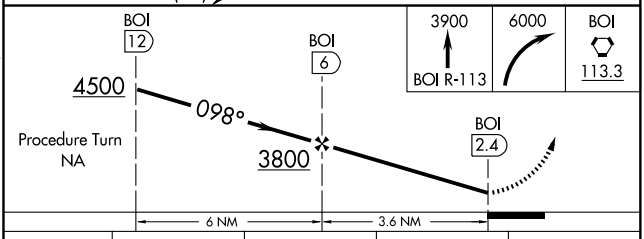
SSALR

MISSED APPROACH: Climb to 3900 via BOI R-113 within 6 NM, then climbing right turn to 6000 direct BOI VORTAC and hold.

ATIS	BOISE APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2







CATEGORY	A	B	C	D
S-10R	3160/24 327 (400-½)			3160/50 327 (400-1)
CIRCLING	3300-1 432 (500-1)	3320-1 452 (500-1)	3320-1½ 452 (500-1½)	3420-2 552 (600-2)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	3794
200°	TDZE	4149
	Apt Elev	4150

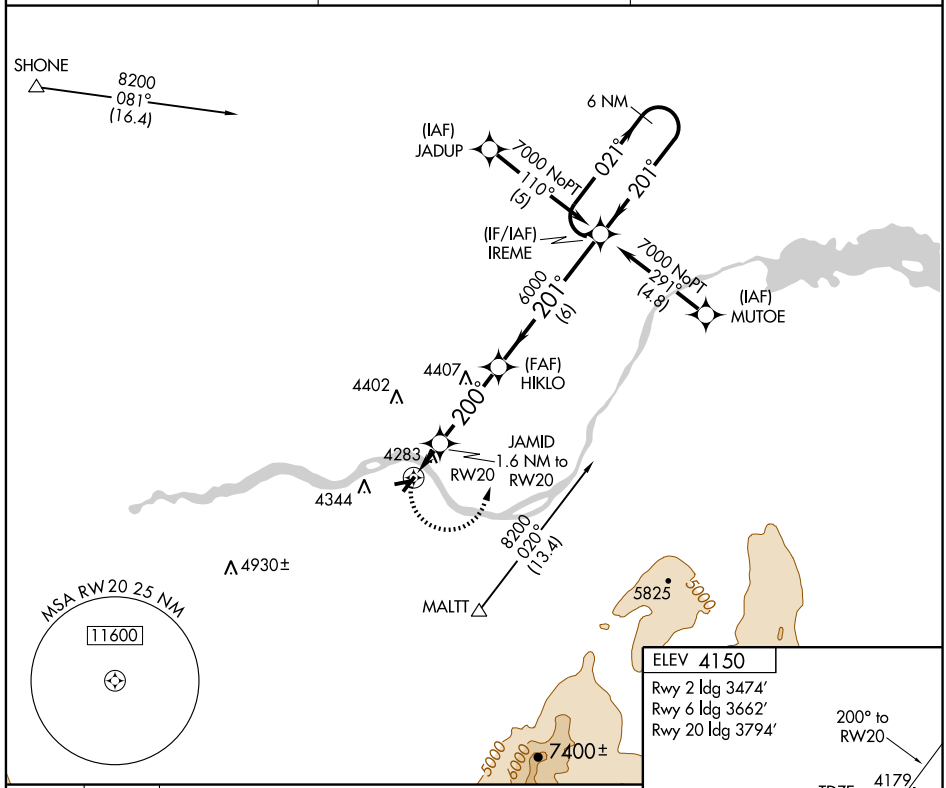
RNAV (GPS) RWY 20

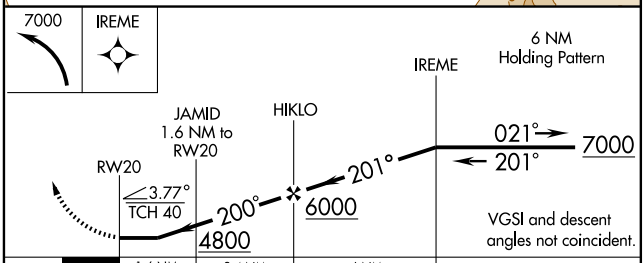
BURLEY MUNI (BYI)

▼ ▲NA If local altimeter setting not received, use Joslin Field-Magic Valley Rgnl altimeter setting and increase all MDAs by 80 feet. GPS or RNP -0.3 required. DME/DME RNP-0.3 NA.

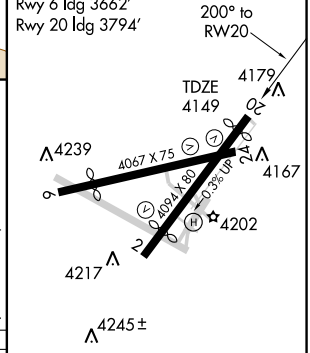
MISSED APPROACH: Climbing left turn to 7000 direct IREME WP and hold.

ASOS	TWIN FALLS APP CON★	CTAF
135.575	126.7 353.75	122.9 (L)





CATEGORY	A	B	C	D
LNAV MDA	4560-1 411 (500-1)		4560-1¼ 411 (500-1¼)	NA
CIRCLING	4660-1 510 (600-1)		4660-1½ 510 (600-1½)	NA



REIL Rwy 20
MIRL Rwys 2-20 and 6-24 (L)

VOR/DME BYI	APP CRS	Rwy Idg	N/A
114.1	100°	TDZE	N/A
Chan 88		Apt Elev	4150

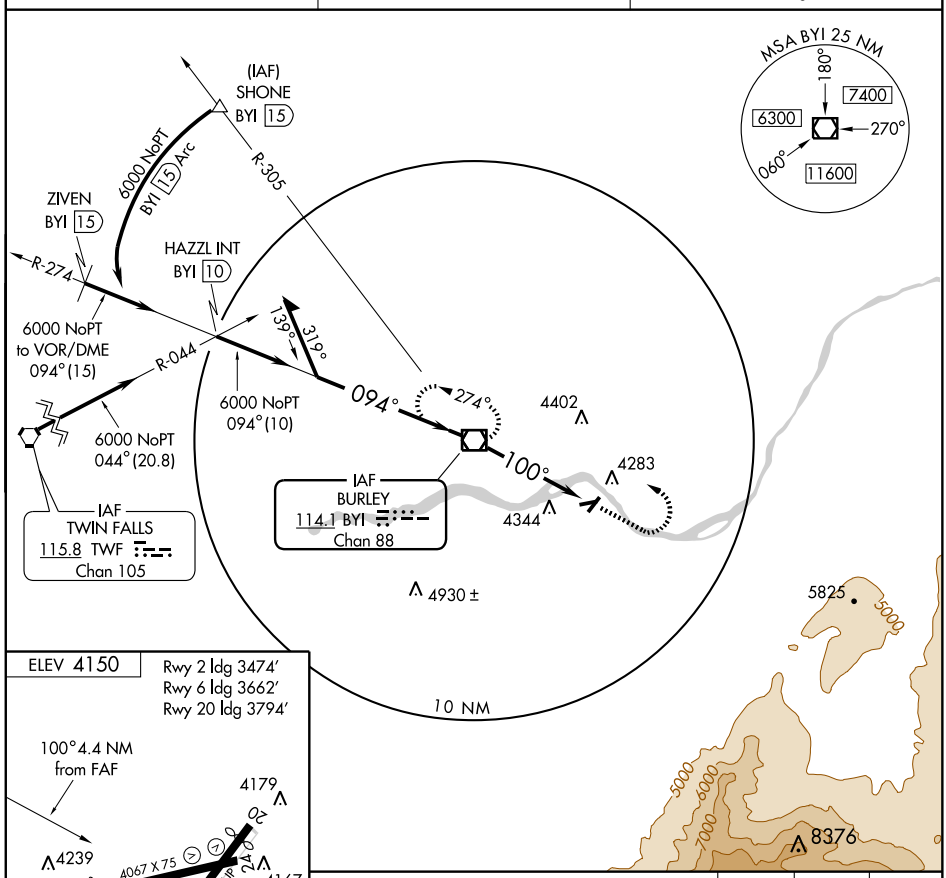
VOR-A

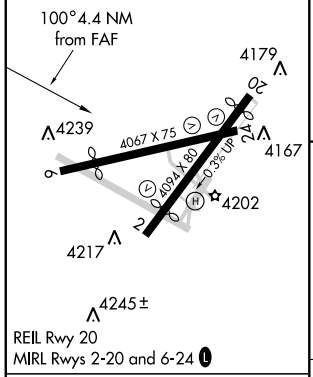
BURLEY MUNI (BYI)

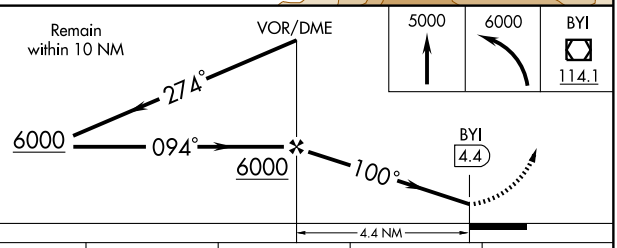
If local altimeter setting not received, use Joslin Field-Magic Valley Rgnl altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct BYI VOR/DME and hold.

ASOS	TWIN FALLS APP CON ★	CTAF
135.575	126.7 353.75	122.9 L







FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
CIRCLING	4660-1	510 (600-1)	4660-1½ 510 (600-1½)	4700-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

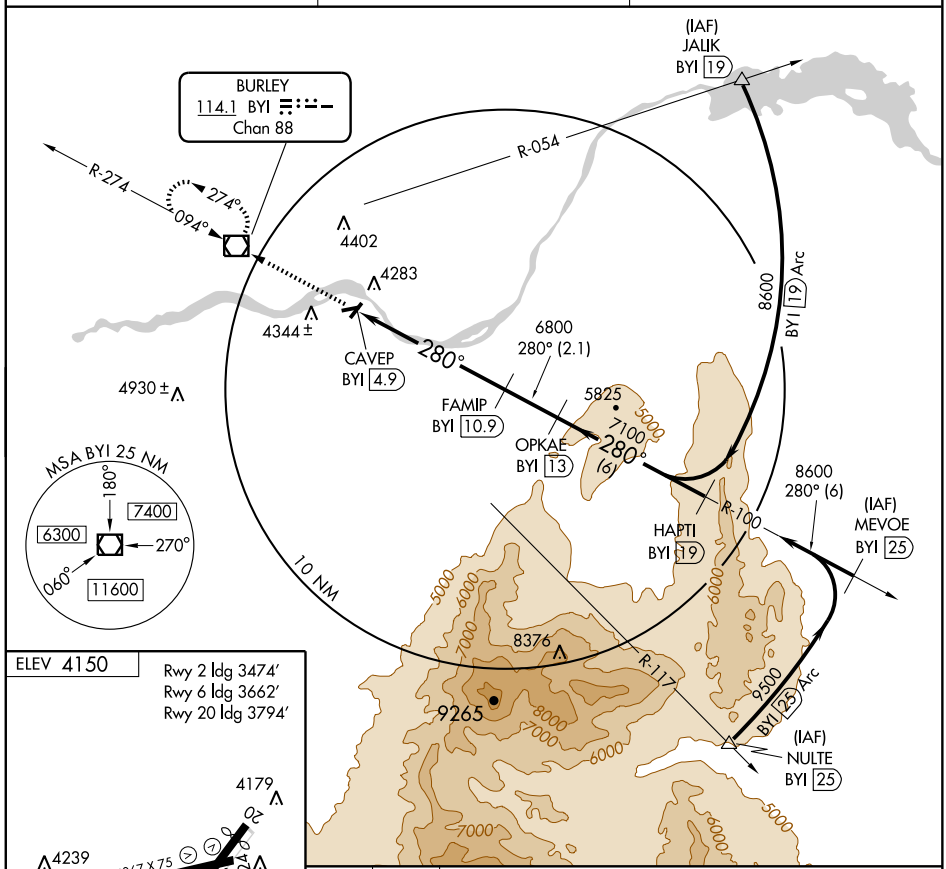
VOR/DME BYI	APP CRS	Rwy Idg N/A
114.1	280°	TDZE N/A
Chan 88		Apt Elev 4150

VOR/DME-B
BURLEY MUNI (BYI)

If local altimeter setting not received, use Joslin Field-Magic Valley Rgnl altimeter setting and increase all MDAs 80 feet.

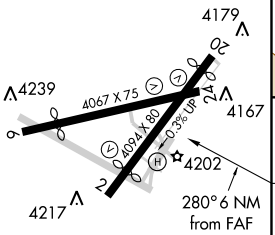
MISSED APPROACH: Climb to 6000 direct BYI VOR/DME and hold.

ASOS	TWIN FALLS APP CON ★	CTAF
135.575	126.7 353.75	122.9 L



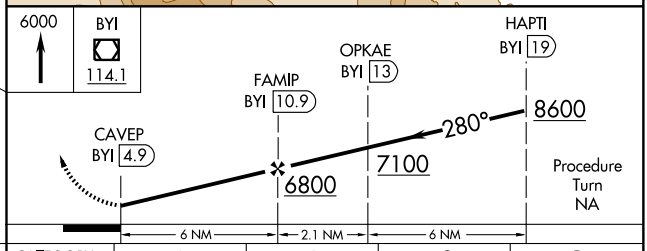
ELEV 4150

Rwy 2 ldg 3474′
Rwy 6 ldg 3662′
Rwy 20 ldg 3794′



4245±

REIL Rwy 20
MIRL Rwys 2-20 and 6-24 L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	4660-1	510 (600-1)	4660-1½ 510 (600-1½)	4700-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

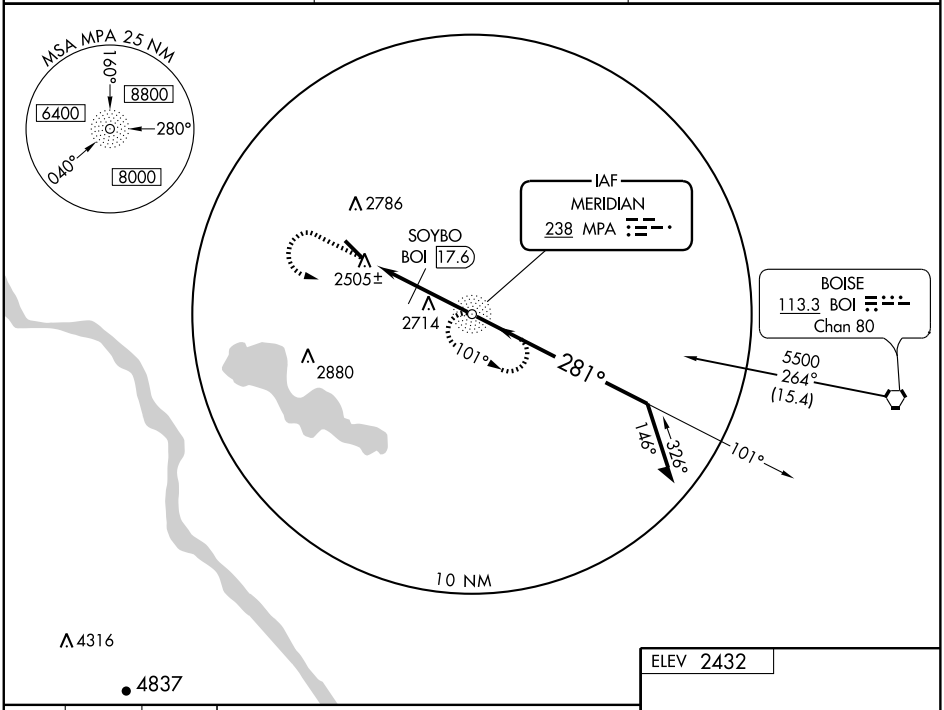
NDB MPA	APP CRS	Rwy Idg	5500
238	281°	TDZE	2432
		Apt Elev	2432

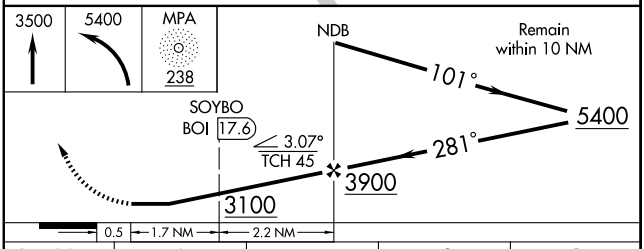
NDB RWY 30
CALDWELL INDUSTRIAL (EUL)

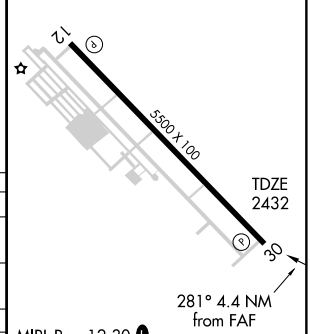
When local altimeter setting not received, use Boise altimeter setting and increase all MDA 120 feet and all visibilities ½ mile.

MISSED APPROACH: Climb to 3500 then climbing left turn to 5400 direct MPA NDB and hold, continue climb-in-hold to 5400.

AWOS-3	BOISE APP CON	UNICOM
135.075	119.6 269.4	122.7 (CTAF) L







MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-30	3100-1	668 (700-1)	3100-1¾ 668 (700-1¾)	3100-2 668 (700-2)
CIRCLING	3100-1	668 (700-1)	3100-1¾ 668 (700-1¾)	3100-2 668 (700-2)
DME MINIMUMS				
S-30	2940-1	508 (600-1)	2940-1½	508 (600-1½)
CIRCLING	3100-1	668 (700-1)	3100-1¾ 668 (700-1¾)	3100-2 668 (700-2)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 97707 W12A	APP CRS 119°	Rwy Idg 5500 TDZE 2431 Apt Elev 2432

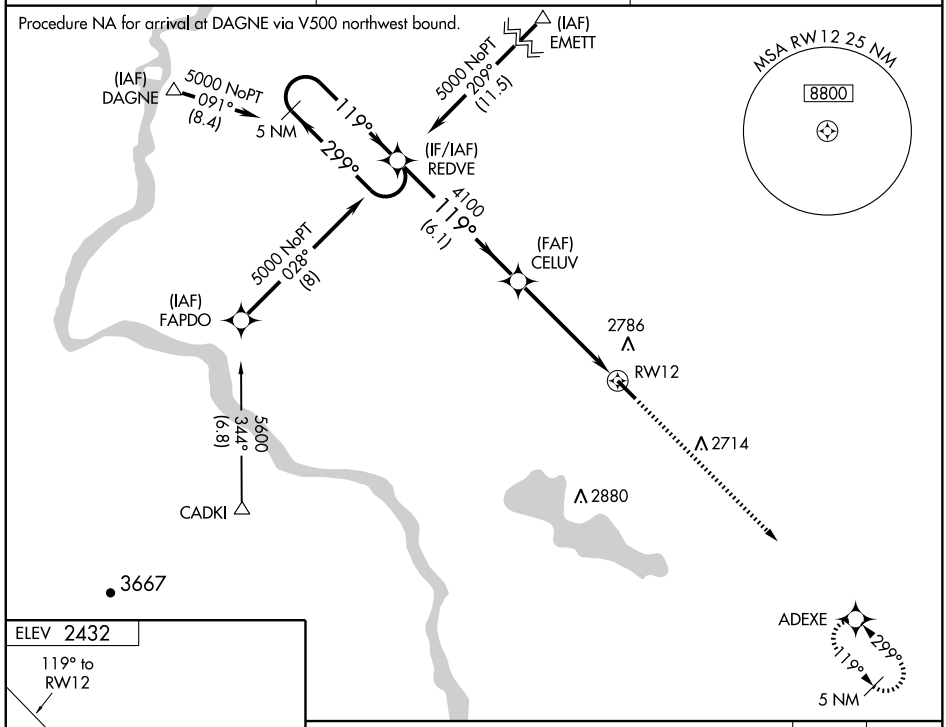
RNAV (GPS) RWY 12
CALDWELL INDUSTRIAL (EUL)

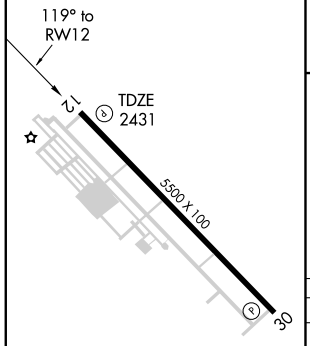
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Boise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). When local altimeter setting not received, use Boise altimeter setting and increase all DA/MDA 120 feet and all visibilities ½ mile.

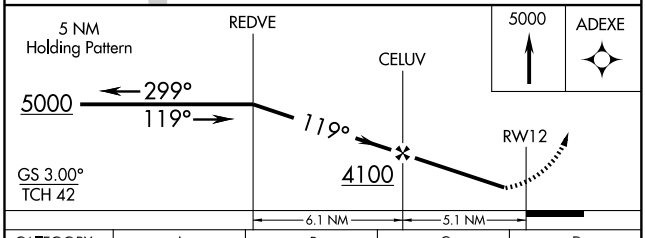
MISSED APPROACH: Climb to 5000 direct ADEXE and hold.

AWOS-3	BOISE APP CON	UNICOM
135.075	119.6 269.4	122.7 (CTAF) L

Procedure NA for arrival at DAGNE via V500 northwest bound.







CATEGORY	A	B	C	D
LPV DA	2700-1 269 (300-1)			
LNAV/VNAV DA	2994-2 563 (600-2)			
LNAV MDA	2840-1 409 (500-1)		2840-1¼ 409 (500-1¼)	
CIRCLING	3100-1 668 (700-1)		3100-1¾ 668 (700-1¾)	3100-2 668 (700-2)

MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

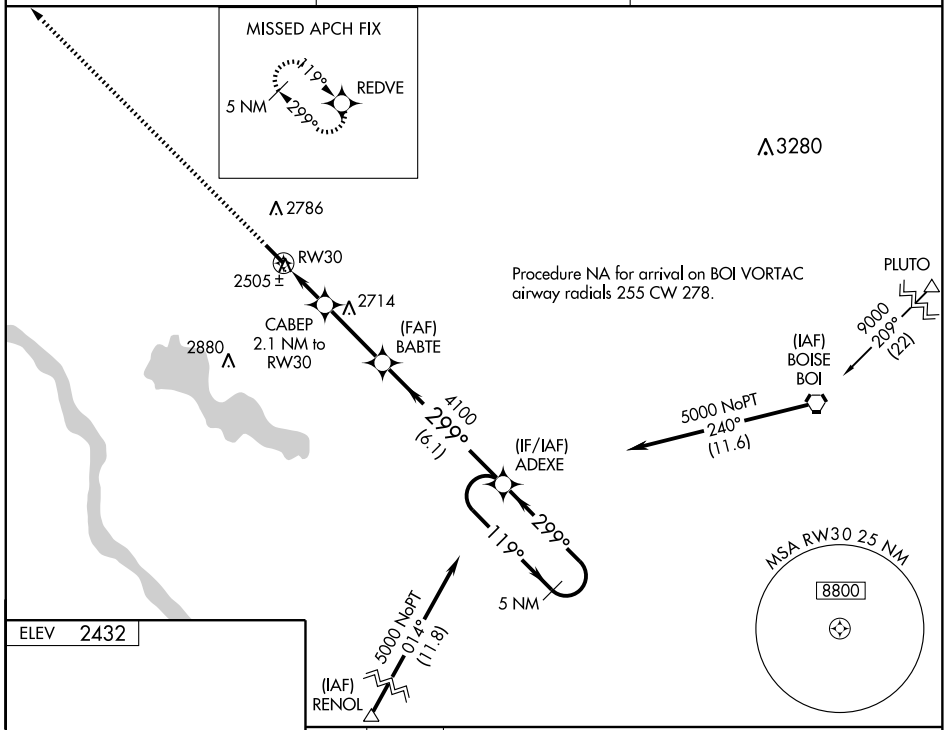
WAAS	APP CRS	Rwy Idg	5500
CH 73007	299°	TDZE	2432
W30A		Apt Elev	2432

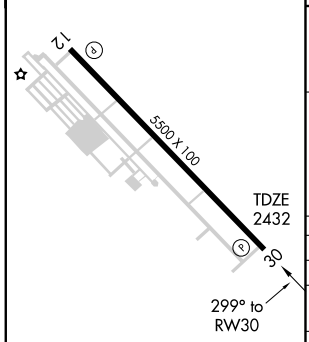
RNAV (GPS) RWY 30
CALDWELL INDUSTRIAL (EUL)

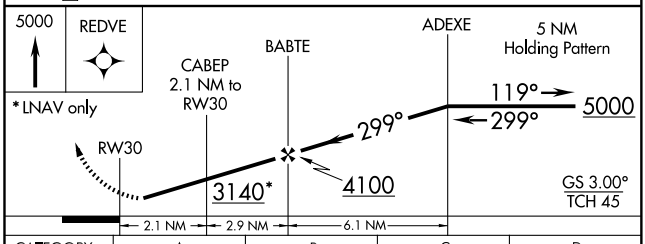
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Boise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). When local altimeter setting not received, use Boise altimeter setting and increase all DA/MDA 120 feet and all visibilities ½ mile.

MISSED APPROACH: Climb to 5000 direct REDVE and hold.

AWOS-3	BOISE APP CON	UNICOM
135.075	119.6 269.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2687-1 255 (300-1)			
LNAV/VNAV DA	2822-1¼ 390 (400-1¼)			
LNAV MDA	2880-1 448 (500-1)		2880-1¼ 448 (500-1¼)	2880-1½ 448 (500-1½)
CIRCLING	3100-1 668 (700-1)		3100-1¾ 668 (700-1¾)	3100-2 668 (700-2)

MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-COE	APP CRS	Rwy Idg	7400
110.7	051°	TDZE	2290
		Apt Elev	2320

ILS or LOC/DME RWY 5

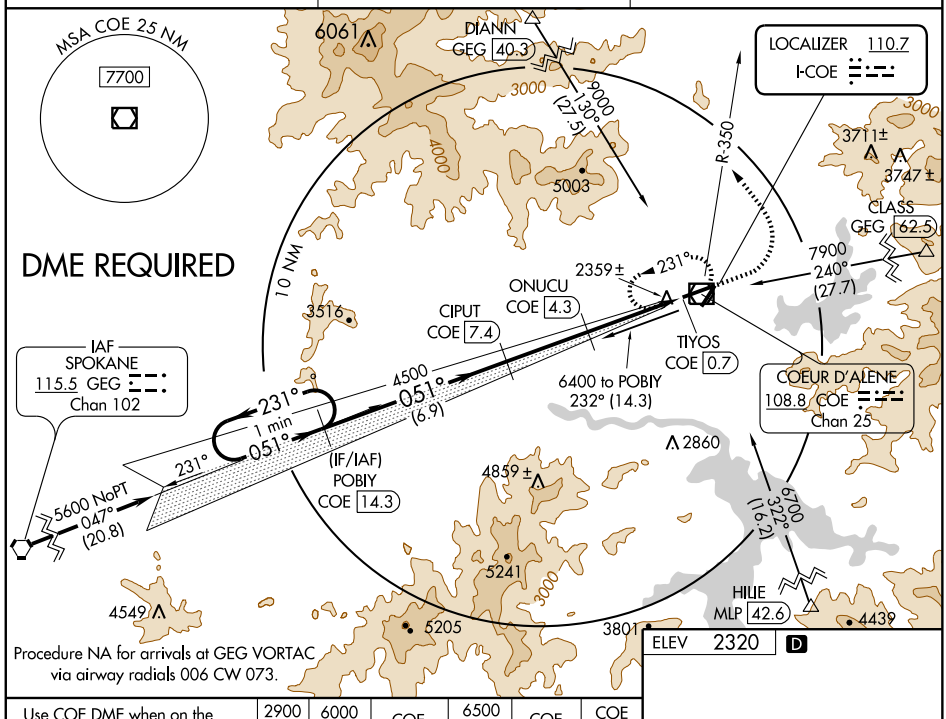
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

Simultaneous reception of I-COE localizer and COE DME required. Autopilot coupled approach NA below 2795. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDA 80 feet and all visibilities ¼ mile.

MALSR

MISSED APPROACH: Climb to 2900 then climbing left turn to 6000 via COE R-350 outbound then climbing left turn to 6500 via COE R-350 inbound to COE VOR/DME and hold.

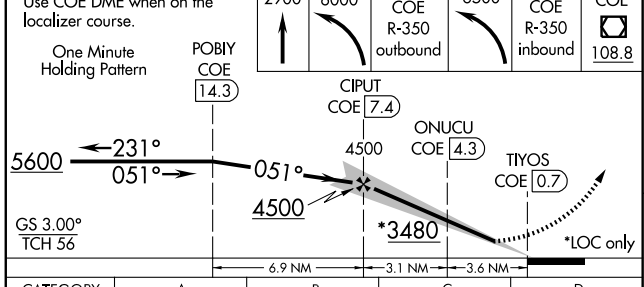
AWOS-3	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L

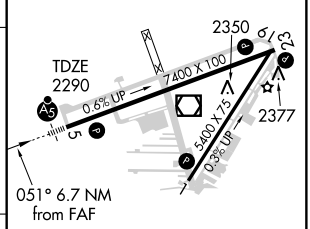


ELEV 2320 D

Use COE DME when on the localizer course.

One Minute Holding Pattern





CATEGORY	A	B	C	D
S-ILS 5	2490-½ 200 (200-½)			
S-LOC 5	2860-½ 570 (600-½)		2860-1 570 (600-1)	2860-1¼ 570 (600-1¼)
CIRCLING	2860-1 540 (600-1)		2880-1½ 560 (600-1½)	2880-2 560 (600-2)

MIRL Rwy 1-19 L
HIRL Rwy 5-23 L
REIL Rwys 1 and 23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB LEN	APP CRS		
347	052°	Rwy Idg	7400
		TDZE	2290
		Apt Elev	2320

NDB RWY 5

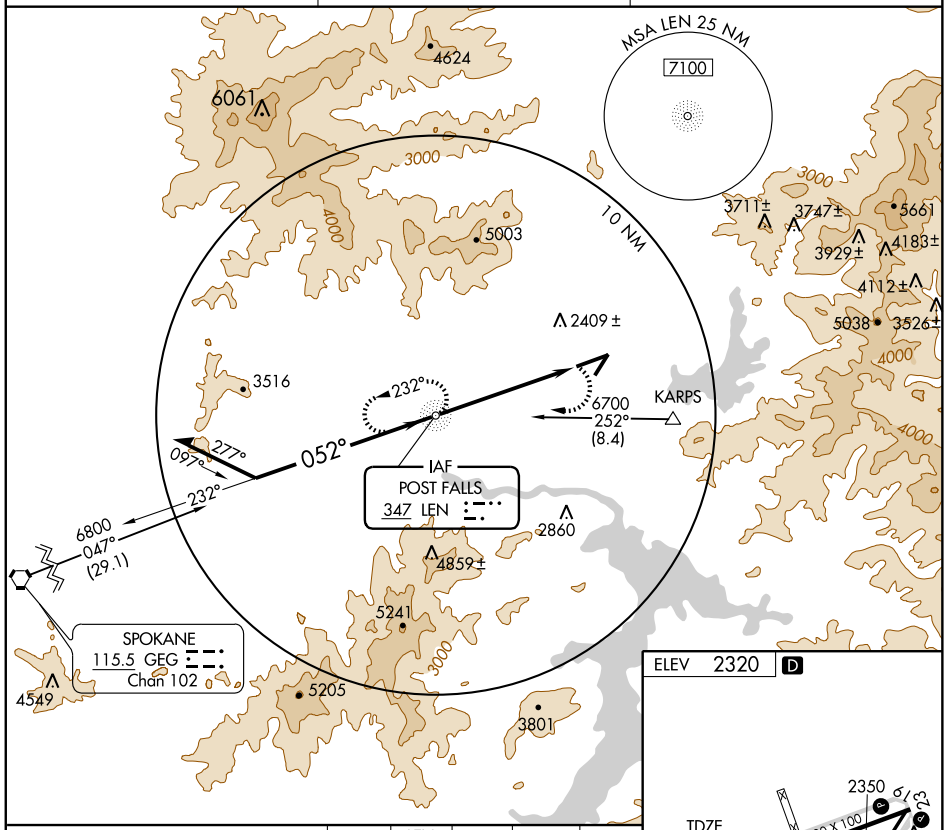
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

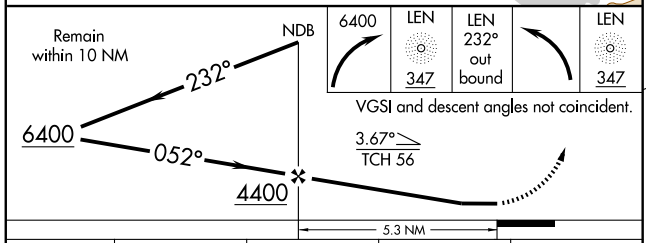
When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDA 80 feet and S-5 and circling Cat C visibility ¼ mile.

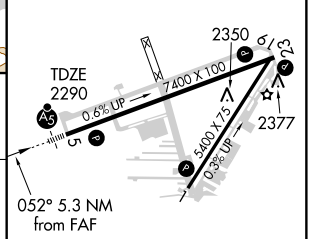
MALSR

MISSED APPROACH: Climbing right turn to 6400 direct LEN NDB and via LEN NDB bearing 232° outbound then left turn direct LEN NDB and hold.

AWOS-3	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L







MIRL Rwy 1-19 L
HIRL Rwy 5-23 L
REIL Rwys 1 and 23 L

CATEGORY	A	B	C	D
S-5	2780-¾ 490 (500-¾)	2900-¾ 610 (600-¾)	2920-1¼ 630 (600-1¼)	NA
CIRCLING	2920-1 600 (600-1)		2920-1½ 600 (600-1½)	NA

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 70608 W05A	APP CRS 051°	Rwy Idg 7400 TDZE 2290 Apt Elev 2320

RNAV (GPS) RWY 5

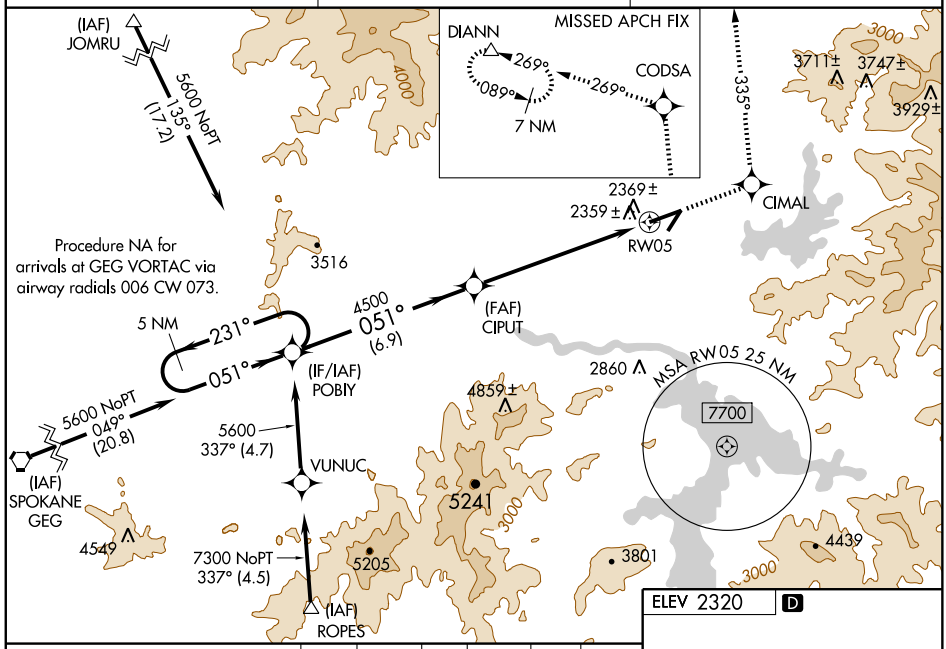
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

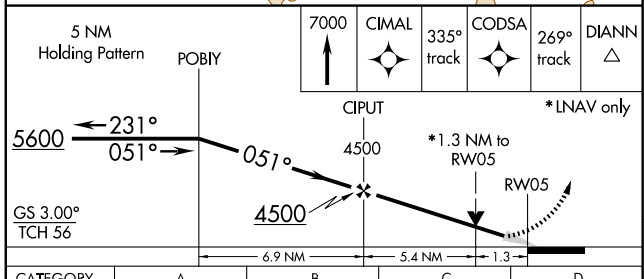
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDA 80 feet and all visibilities ¼ mile. Baro-VNAV and VDP NA when using Spokane Intl altimeter setting. For inoperative MALSR when using Spokane Intl altimeter setting, increase LNAV Cats A and B visibility ¼ mile.

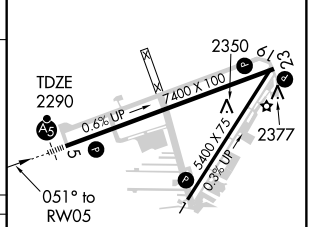
MALSR

MISSED APPROACH: Climb to 7000 direct CIMAL and via 335° track to CODSA and via 269° track to DIANN and hold.

AWOS-3	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2490-½ 200 (200-½)			
LNAV/VNAV DA	2653-¾ 363 (400-¾)			
LNAV MDA	2740-½ 450 (500-½)		2740-¾ 450 (500-¾)	2740-1 450 (500-1)
CIRCLING	2740-1 420 (500-1)	2860-1 540 (600-1)	2880-1½ 560 (600-1½)	2880-2 560 (600-2)

MIRL Rwy 1-19 L
HIRL Rwy 5-23 L
REIL Rwys 1 and 23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME COE	APP CRS	Rwy Idg	5400
108.8	344°	TDZE	2311
Chan 25		Apt Elev	2320

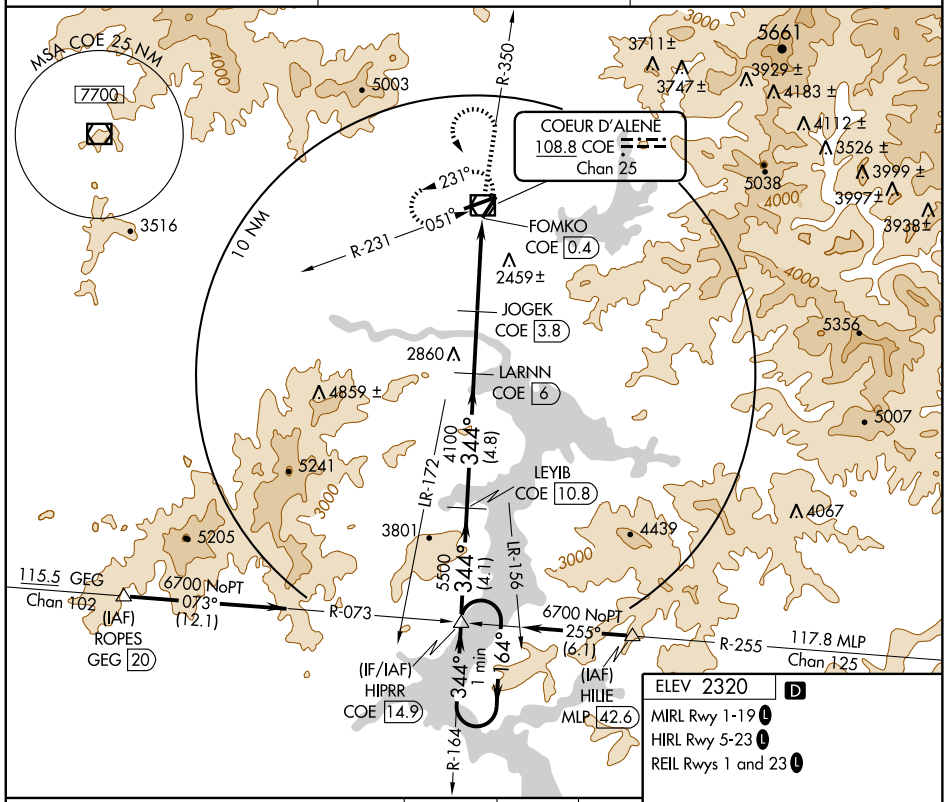
VOR/DME RWY 1

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

Visibility reduction by helicopters NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDA 80 feet and S-1 and circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 6000 via COE R-350 outbound then climbing left turn to 6500 via COE R-350 inbound to COE VOR/DME and hold.

AWOS-3	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L

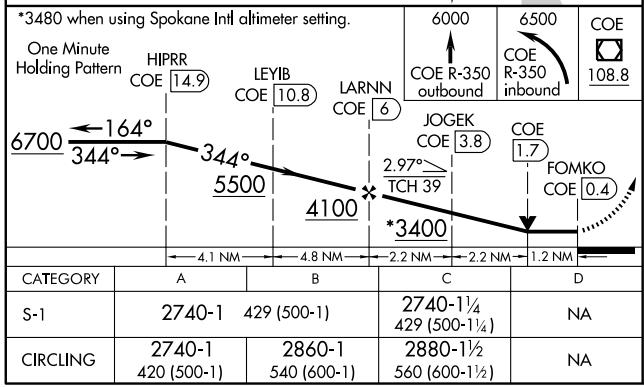


ELEV 2320 D

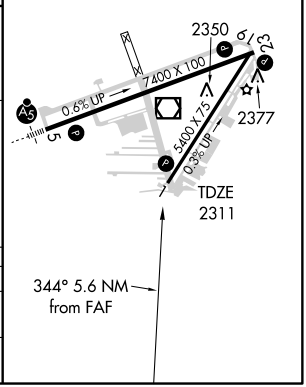
MIRL Rwy 1-19 L

HIRL Rwy 5-23 L

REIL Rwys 1 and 23 L



CATEGORY	A	B	C	D
S-1	2740-1 429 (500-1)		2740-1¼ 429 (500-1¼)	NA
CIRCLING	2740-1 420 (500-1)	2860-1 540 (600-1)	2880-1½ 560 (600-1½)	NA



NW-1, 14 JAN 2010 to 11 FEB 2010

COEUR D'ALENE, IDAHO

AL-527 (FAA)

VOR/DME COE	APP CRS	Rwy Idg	7400
108.8	057°	TDZE	2290
Chan 25		Apt Elev	2320

VOR RWY 5

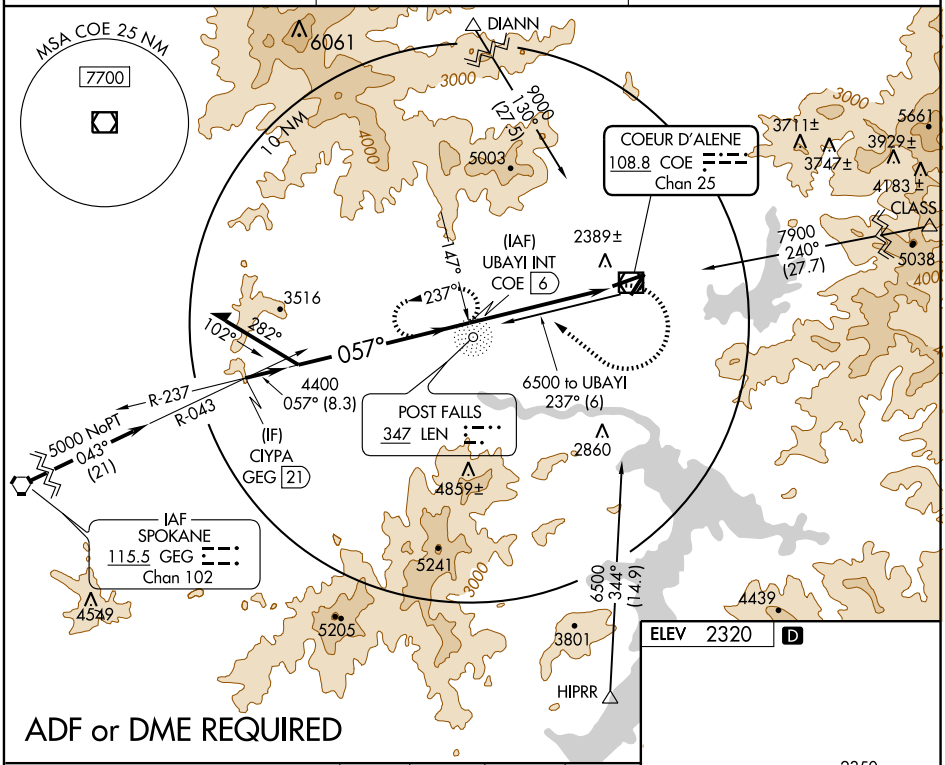
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

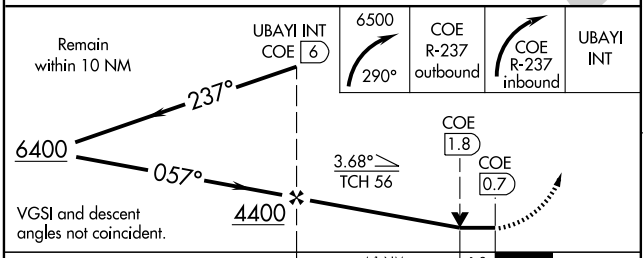
When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDA 80 feet and circling Cat C visibility to 1¾ miles.
VDP NA when using Spokane Intl altimeter setting.
ADF or DME required.

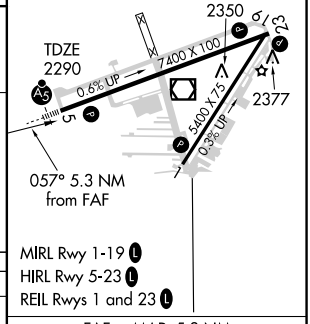
MALSR

MISSED APPROACH: Climbing right turn to 6500 via heading 290° and COE R-237 outbound then right turn via COE R-237 inbound to UBAYI INT/COE 6 DME and hold.

AWOS-3	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L







ELEV 2320 D

MIRL Rwy 1-19 L
HIRL Rwy 5-23 L
REIL Rwys 1 and 23 L

CATEGORY	A	B	C	D
S-5	2700-½ 410 (400-½)		2700-¾ 410 (400-¾)	NA
CIRCLING	2720-1 400 (400-1)	2860-1 540 (600-1)	2880-1½ 560 (600-1½)	NA

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

NW-1, 14 JAN 2010 to 11 FEB 2010

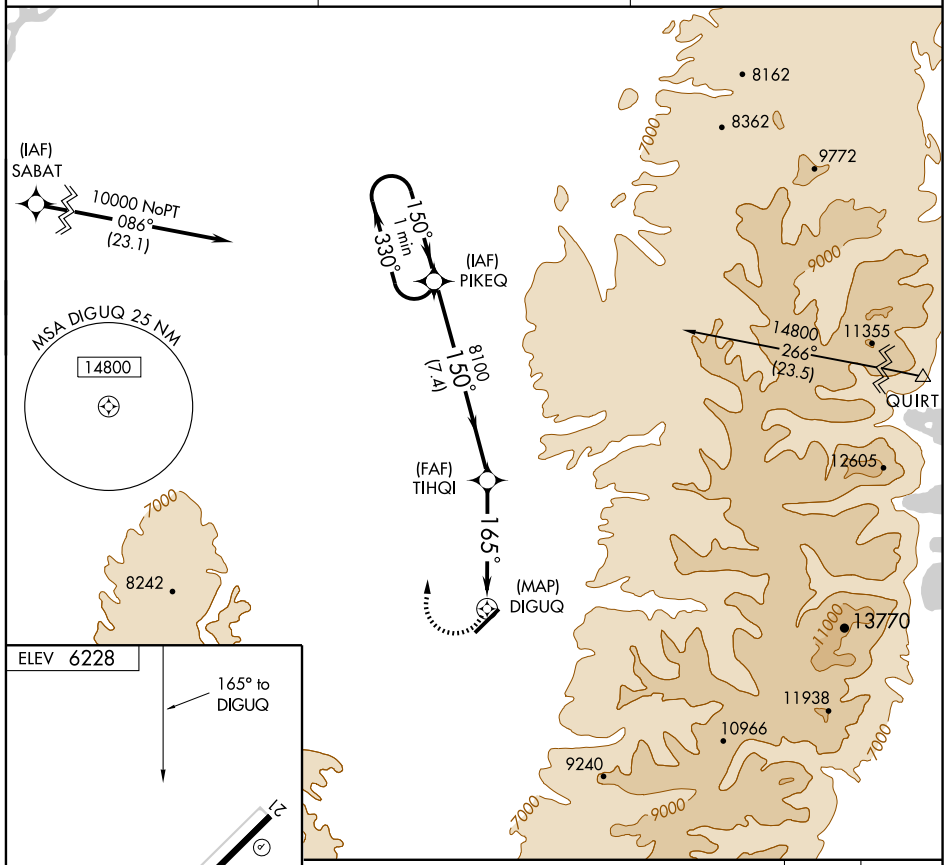
APP CRS	Rwy Idg	N/A
165°	TDZE	N/A
	Apt Elev	6228

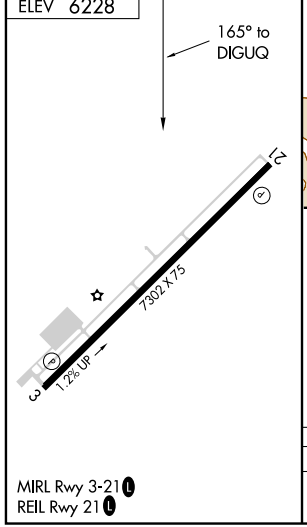
GPS-A
DRIGGS-REED MEMORIAL (DIJ)

T
NA

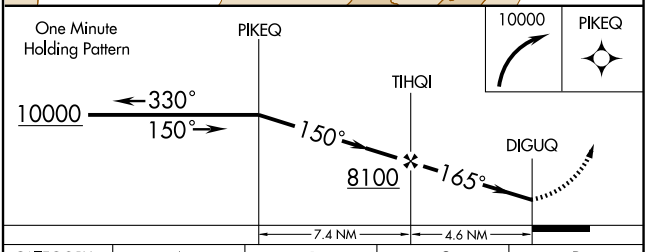
MISSED APPROACH: Climbing right turn to 10000 direct PIKEQ and hold.

ASOS	SALT LAKE CENTER	UNICOM
120.775	132.4 239.25	122.7 (CTAF) L





MIRL Rwy 3-21 L
REIL Rwy 21 L



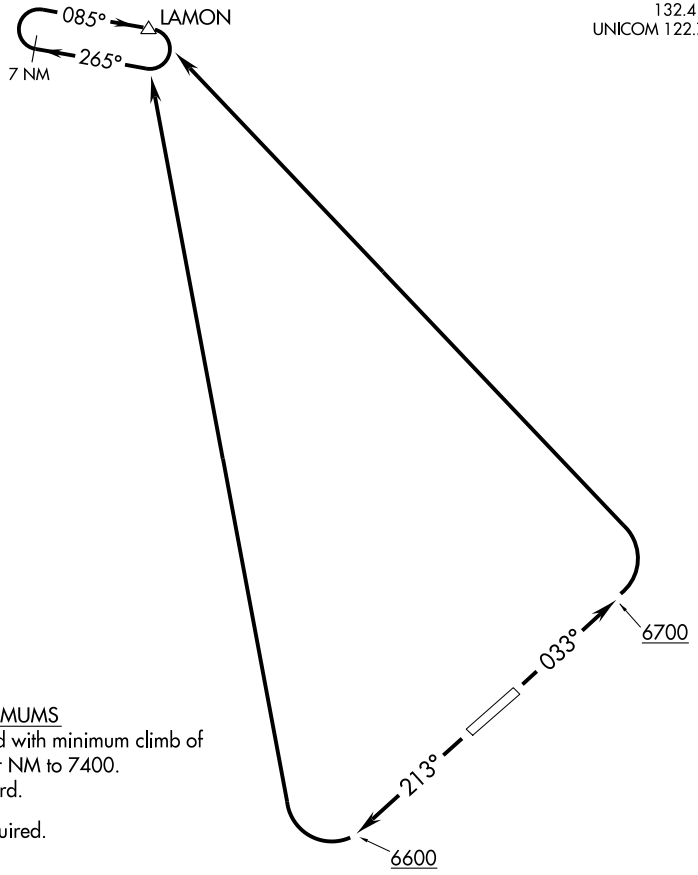
CATEGORY	A	B	C	D
CIRCLING	6780-1	552 (600-1)	6800-1½ 572 (600-1½)	6860-2 632 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

LAMON TWO DEPARTURE (RNAV) (OBSTACLE)

DRIGGS-REED MEMORIAL (DIJ)
DRIGGS, IDAHO

SALT LAKE CENTER
132.4 239.25
UNICOM 122.7 (CTAF)



TAKE-OFF MINIMUMS
Rwy 3: Standard with minimum climb of 250′ per NM to 7400.
Rwy 21: Standard.

NOTE: GPS required.

NOTE: RNAV 1

TAKE-OFF OBSTACLE NOTES
Rwy 3: Trees 1227′ from DER, 343′ left of centerline, 50′ AGL/6266′ MSL.
Trees 697′ from DER, 327′ right of centerline, 50′ AGL/6246′ MSL.
Trees 2106′ from DER, 469′ right of centerline, 50 AGL/6282′ MSL.
Rwy 21: Building 1437′ from DER, 730′ left of centerline, 70′ AGL/6189′ MSL.
Building 52′ from DER, 473′ right of centerline, 50 AGL/6191′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb heading 033° to 6700, then climbing left turn direct LAMON. Thence....

TAKE-OFF RUNWAY 21: Climb heading 213° to 6600, then climbing right turn direct LAMON. Thence....

....cross LAMON at or above MEA for direction of flight. If required, continue climb in LAMON holding pattern to cross LAMON at or above MEA for direction of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	7302
018°	TDZE	6180
	Apt Elev	6228

RNAV (GPS) RWY 3
DRIGGS-REED MEMORIAL (DIJ)

T
A NA

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 9000 direct TETDO and via 309° track to LAMON and hold.

ASOS	SALT LAKE CENTER	UNICOM
120.775	132.4 239.25	122.7 (CTAF) L

MSA DIVVE 25 NM
15000

085° LAMON
7 NM
265°
10400
205°
(25.5)

TETDO
(MAP)
DIVVE
6259±
018°

(FAF)
FIXOD
8100
349° (1.9)

VICUP
8700
349° (4.1)

(IF)
TUNOC

EYITA
10000
125°
(17)

IDAHO FALLS
IDA
10000
089°
(30.5)

(IAF)
RUDTO
9800
028°
(12)

10900
303° (4)

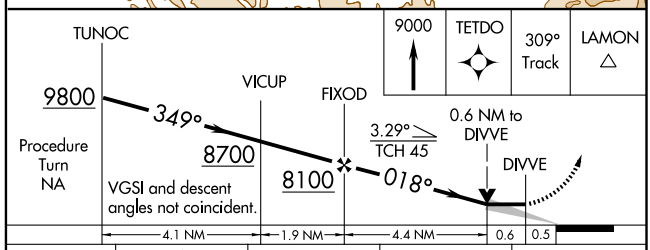
GIRGE

11400
283°
(18.8)

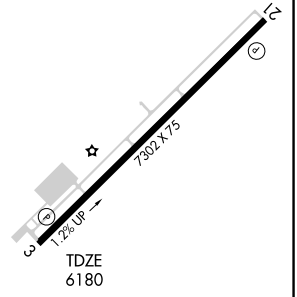
CILEG

8242
7941
9019
8620
8191
9482
9835
10025
8952
9660
9980
9004
10352
10927
9240
10966
11938
13770
12605
11355
10741

ELEV 6228



9000	TETDO	309° Track	LAMON △



CATEGORY	A	B	C	D
LNAV MDA	6520-1 340 (400-1)			
CIRCLING	6760-1 532 (600-1)	6780-1 552 (600-1)	6800-1½ 572 (600-1½)	6800-2 572 (600-2)

MIRL Rwy 3-21 L
REIL Rwy 21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB HDG	APP CRS		
211	256°	Rwy Idg	4745
		TDZE	3732
		Apt Elev	3732

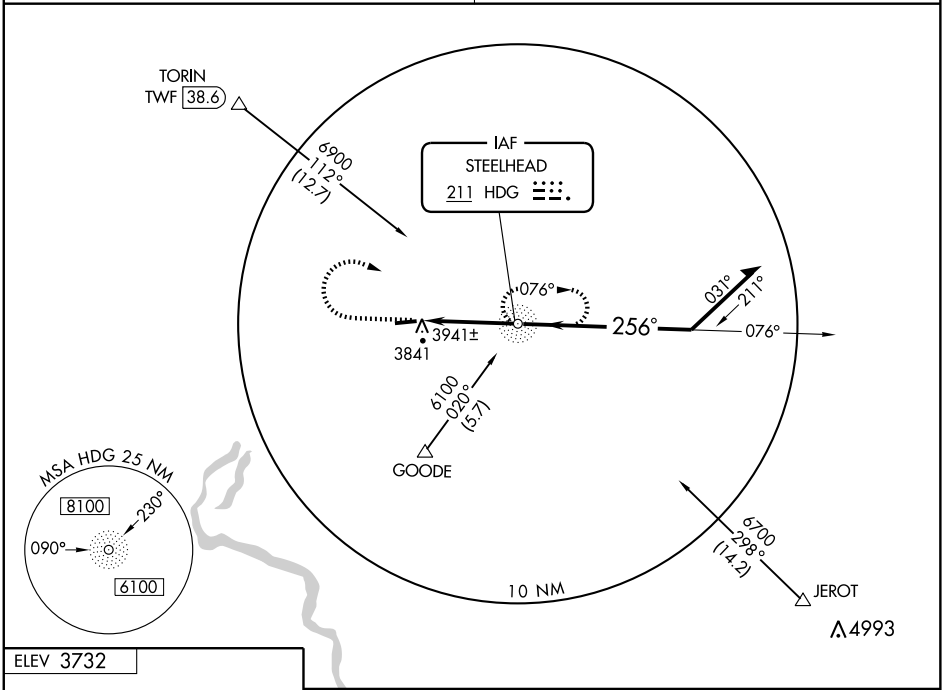
NDB RWY 25
GOODING MUNI (GNG)

Visibility reduction by helicopters NA.
Obtain local altimeter setting on CTAF; when not received use Jerome County altimeter setting.

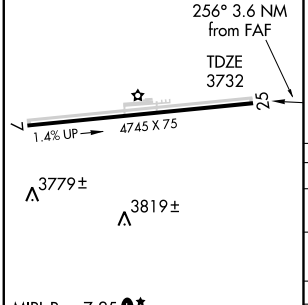
MISSED APPROACH: Climb to 4700 then climbing right turn to 5600 direct HDG NDB and hold.

SALT LAKE CENTER
118.05 363.0

UNICOM
122.8 (CTAF) L★

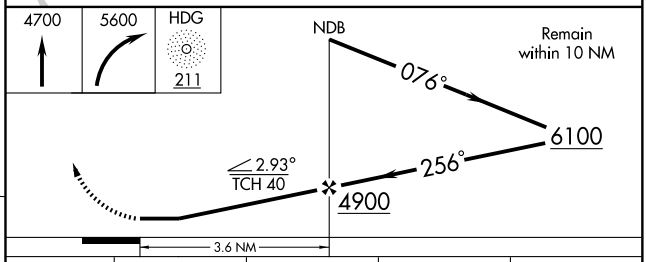


ELEV 3732



MIRL Rwy 7-25 L★

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12



CATEGORY	A	B	C	D
S-25	4260-1	528 (600-1)	4260-1½ 528 (600-1½)	4260-1¾ 528 (600-1¾)
CIRCLING	4260-1	528 (600-1)	4260-1½ 528 (600-1½)	4300-2 568 (600-2)
JEROME COUNTY ALTIMETER SETTING MINIMUMS				
S-25	4340-1	608 (700-1)	4340-1¾ 608 (700-1¾)	4340-2 608 (700-2)
CIRCLING	4340-1	608 (700-1)	4340-1¾ 608 (700-1¾)	4340-2 608 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	4745
CH 53709	068°	TDZE	3710
W07A		Apt Elev	3732

RNAV (GPS) RWY 7
GOODING MUNI (GNG)

T
A

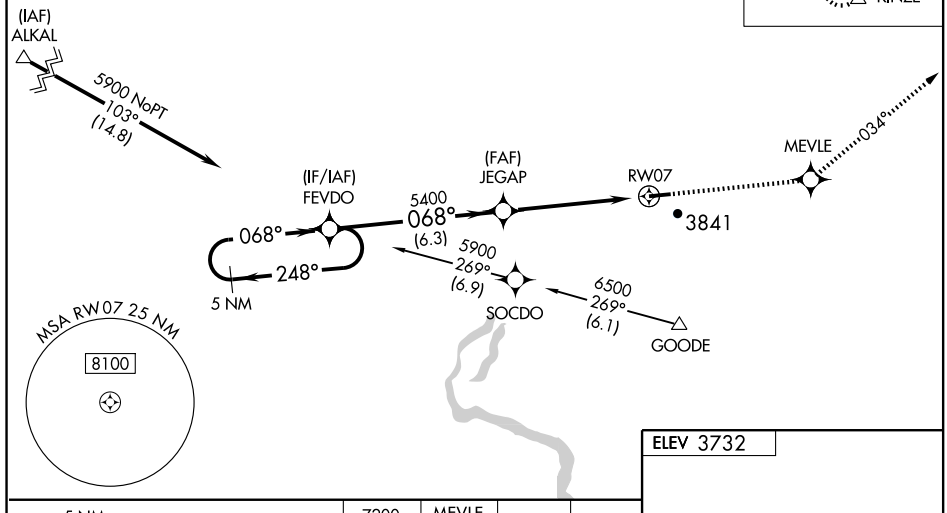
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Jerome County altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F).
Obtain local altimeter setting on CTAF; when not received, use Jerome County altimeter setting and increase all DA 86 feet and all MDA 100 feet. Increase LPV visibility ¼ mile all Cats, LNAV/VNAV visibility ½ mile all Cats, LNAV visibility Cat C and D ¼ mile, and circling visibility Cat C ¼ mile.

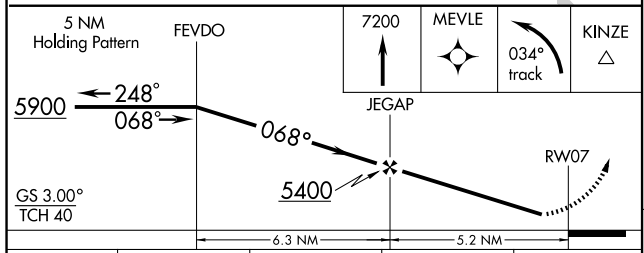
MISSED APPROACH: Climb to 7200 direct MEVLE and left turn via 034° track to KINZE and hold.

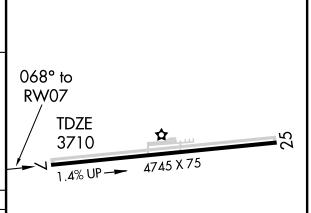
SALT LAKE CENTER	UNICOM
118.05 363.0	122.8 (CTAF) L ★

Procedure NA for arrivals at GOODE via V4 eastbound and V293 southeast bound.
Procedure NA for arrivals at ALKAL via V253 northwest bound.
Procedure NA for arrivals at ALKAL via V330 southwest bound.

MISSED APCH FIX
7 NM
351°
171°
KINZE







CATEGORY	A	B	C	D
LPV DA	3960-1 250 (300-1)			
LNAV/VNAV DA	4049-1¼ 339 (400-1¼)			
LNAV MDA	4120-1 410 (400-1)		4120-1¼ 410 (400-1¼)	
CIRCLING	4260-1 528 (600-1)		4260-1½ 528 (600-1½)	4300-2 568 (600-2)

MIRL Rwy 7-25 L ★

NW-1, 14 JAN 2010 to 11 FEB 2010

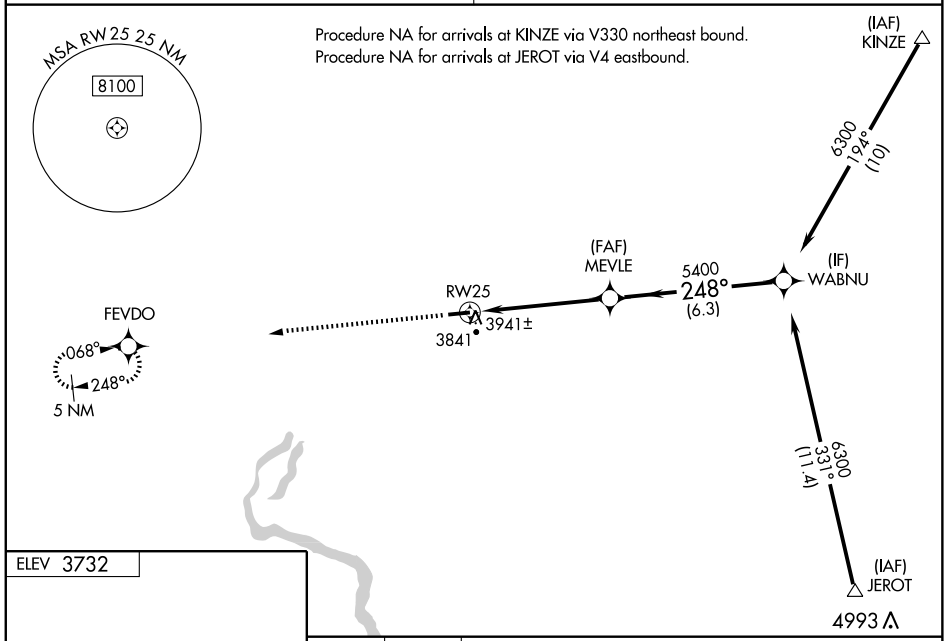
WAAS CH 45909 W25A	APP CRS 248°	Rwy Idg 4745 TDZE 3732 Apt Elev 3732

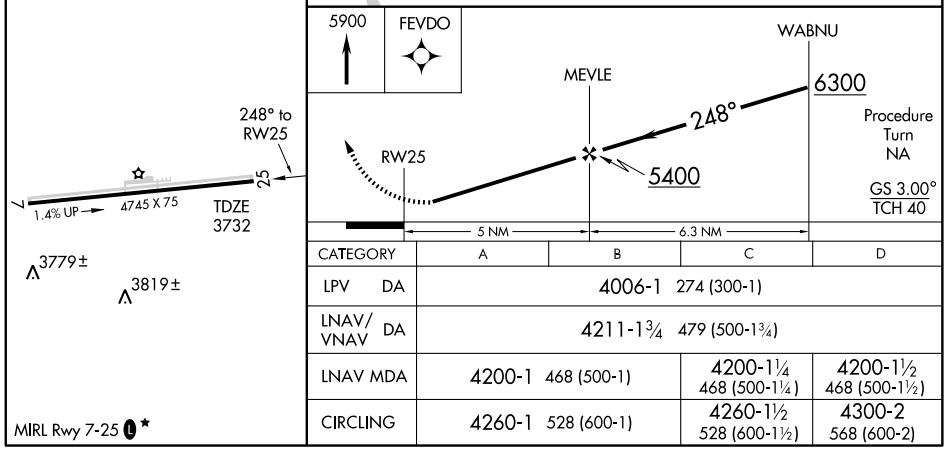
RNAV (GPS) RWY 25
GOODING MUNI (GNG)

DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Jerome County altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F).
Obtain local altimeter setting on CTAF; when not received, use Jerome County altimeter setting and increase all DA 86 feet and all MDA 100 feet. Increase LPV visibility ¼ mile all Cats, LNAV/VNAV visibility ¼ mile all Cats, LNAV visibility Cat C and D ¼ mile, and circling visibility Cat C ¼ mile.

MISSED APPROACH: Climb to 5900 direct FEVDO and hold.

SALT LAKE CENTER	UNICOM
118.05 363.0	122.8 (CTAF) L ★





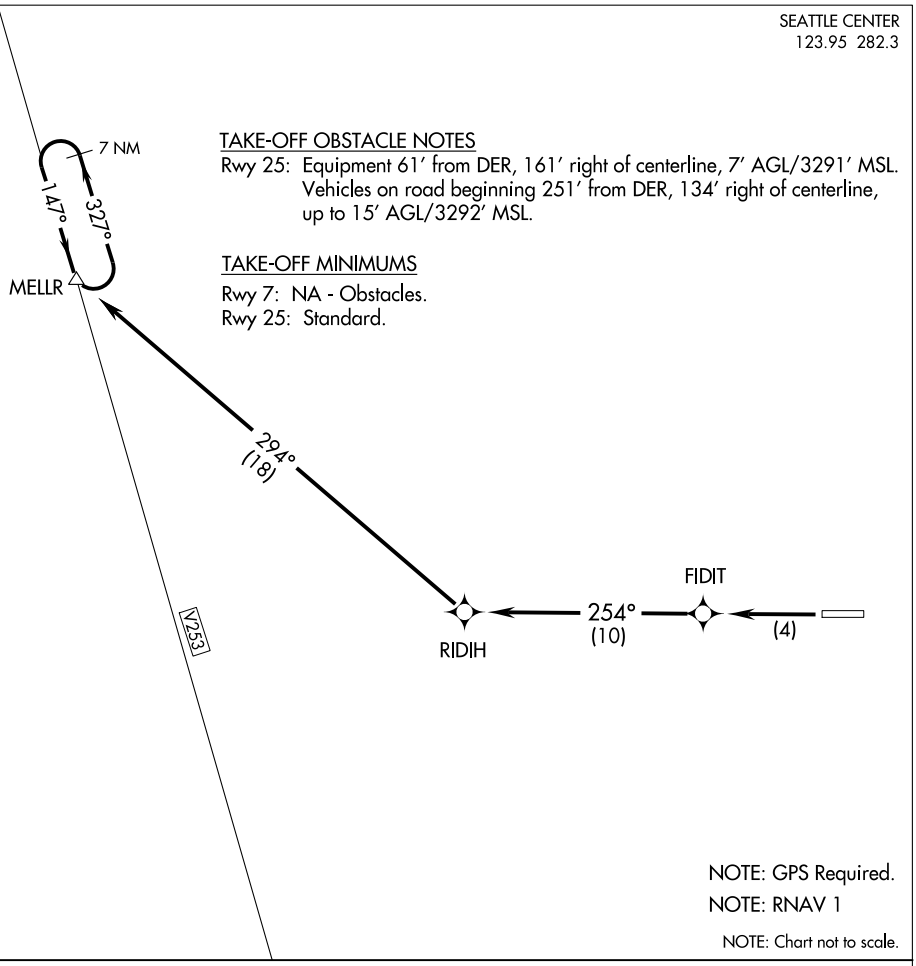
CATEGORY	A	B	C	D
LPV DA	4006-1 274 (300-1)			
LNAV/VNAV DA	4211-1¾ 479 (500-1¾)			
LNAV MDA	4200-1 468 (500-1)		4200-1¼ 468 (500-1¼)	4200-1½ 468 (500-1½)
CIRCLING	4260-1 528 (600-1)		4260-1½ 528 (600-1½)	4300-2 568 (600-2)

MIRL Rwy 7-25 L ★

NW-1, 14 JAN 2010 to 11 FEB 2010

MELLR ONE DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
123.95 282.3



TAKE-OFF OBSTACLE NOTES

Rwy 25: Equipment 61′ from DER, 161′ right of centerline, 7′ AGL/3291′ MSL. Vehicles on road beginning 251′ from DER, 134′ right of centerline, up to 15′ AGL/3292′ MSL.

TAKE-OFF MINIMUMS

Rwy 7: NA - Obstacles.
Rwy 25: Standard.

NOTE: GPS Required.
NOTE: RNAV 1
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25: Climb direct FIDIT then via depicted route to MELLR. Maintain 7400 or assigned altitude. Aircraft southeast bound on V253 continue climb in MELLR holding pattern to MEA before proceeding enroute.

NW-1, 14 JAN 2010 to 11 FEB 2010

GRANGEVILLE, IDAHO

AL-9060 (FAA)

APP CRS	Rwy Idg	5001
073°	TDZE	3302
	Apt Elev	3314

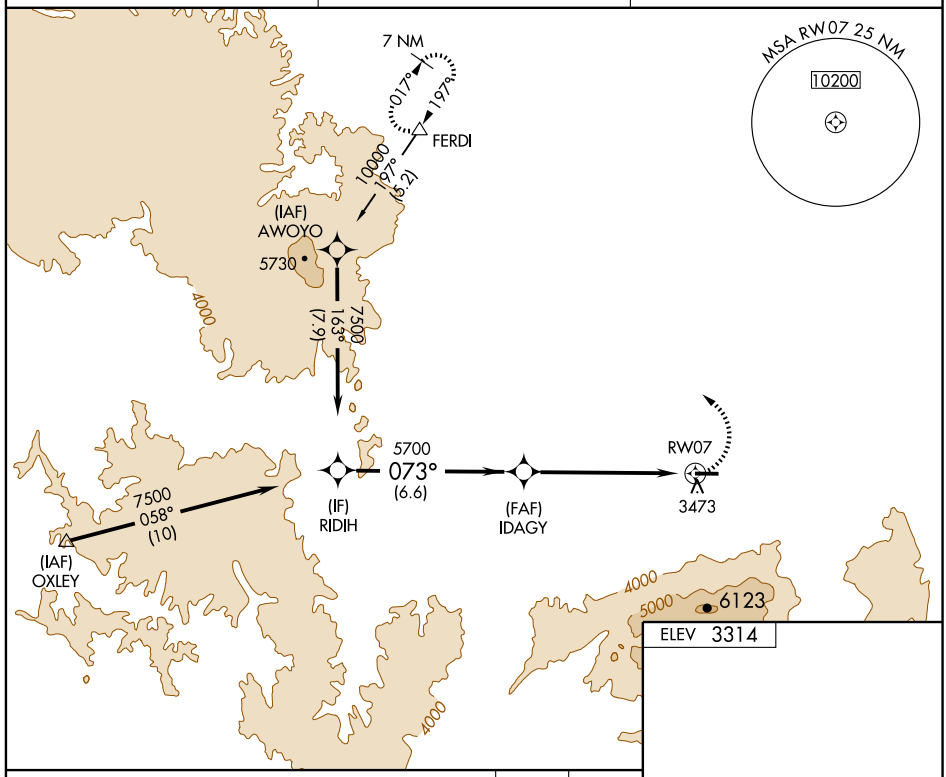
RNAV (GPS) RWY 7

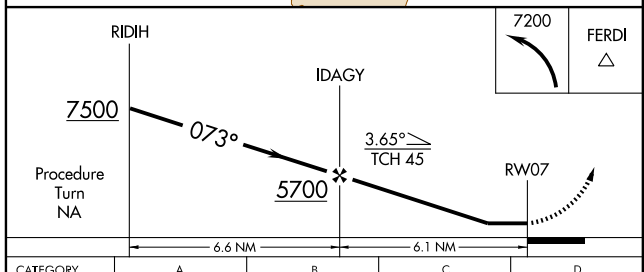
GRANGEVILLE/ IDAHO COUNTY (S80)

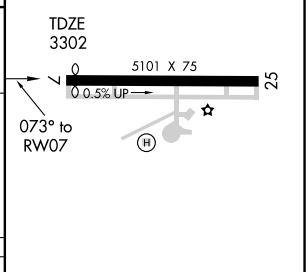
Circling NA south of Rwy 7-25.
NA DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
Use Lewiston-Nez Perce County altimeter setting; when not received, use Pullman/Moscow Rgnl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing left turn to 7200 direct FERDI and hold.

LEWISTON-NEZ PERCE COUNTY ASOS	SEATTLE CENTER	CTAF
135.575	123.95 282.3	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	4660-1¼ 1358 (1400-1¼)	4660-1½ 1358 (1400-1½)	4660-3 1358 (1400-3)	NA
CIRCLING	4660-1¼ 1346 (1400-1¼)	4660-1½ 1346 (1400-1½)	4660-3 1346 (1400-3)	NA

MIRL Rwy 7-25
REIL Rwy 7 L

NW-1, 14 JAN 2010 to 11 FEB 2010

GRANGEVILLE, IDAHO AL-9060 (FAA)

APP CRS	Rwy Idg	5101
239°	TDZE	3314
	Apt Elev	3314

RNAV (GPS) RWY 25

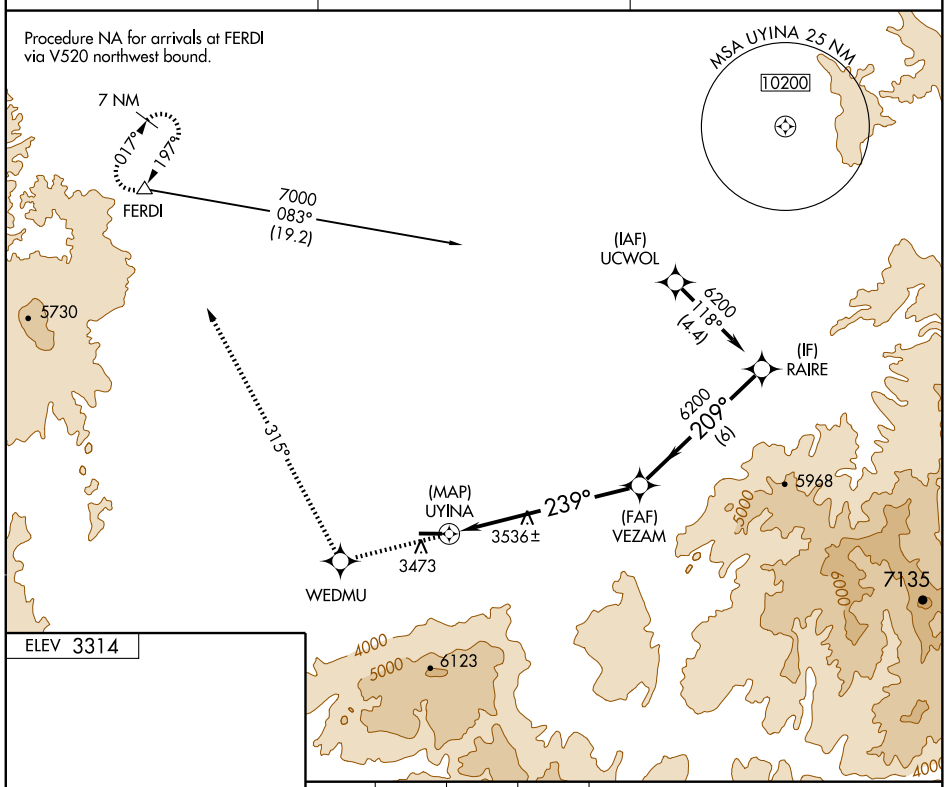
GRANGEVILLE/ IDAHO COUNTY (S80)

Circling NA south of Rwy 7-25.
NA DME/DME RNP-0.3 NA.
Use Lewiston-Nez Perce County altimeter setting; when not received, use Pullman/Moscow Rgnl altimeter setting and increase all MDA 40 feet.

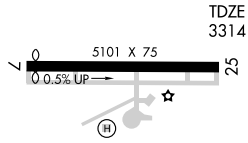
MISSED APPROACH: Climb to 7200 direct WEDMU and via 315° track to FERDI and hold, continue climb-in-hold to 7200.

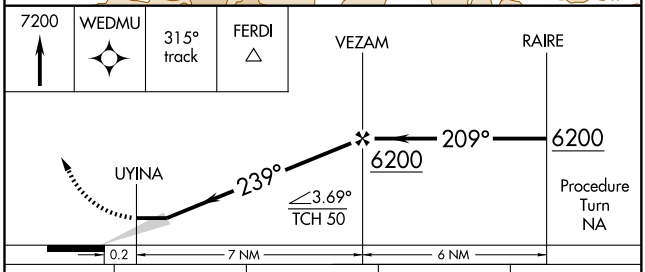
LEWISTON-NEZ PERCE COUNTY ASOS	SEATTLE CENTER	CTAF
135.575	123.95 282.3	122.9 L

Procedure NA for arrivals at FERDI via V520 northwest bound.



ELEV 3314





CATEGORY	A	B	C	D
LNAV MDA	4720-1¼ 1406 (1500-1¼)	4720-1½ 1406 (1500-1½)	4720-3 1406 (1500-3)	NA
CIRCLING	4720-1¼ 1406 (1500-1¼)	4720-1½ 1406 (1500-1½)	4720-3 1406 (1500-3)	NA

MIRL Rwy 7-25
REIL Rwy 7 L

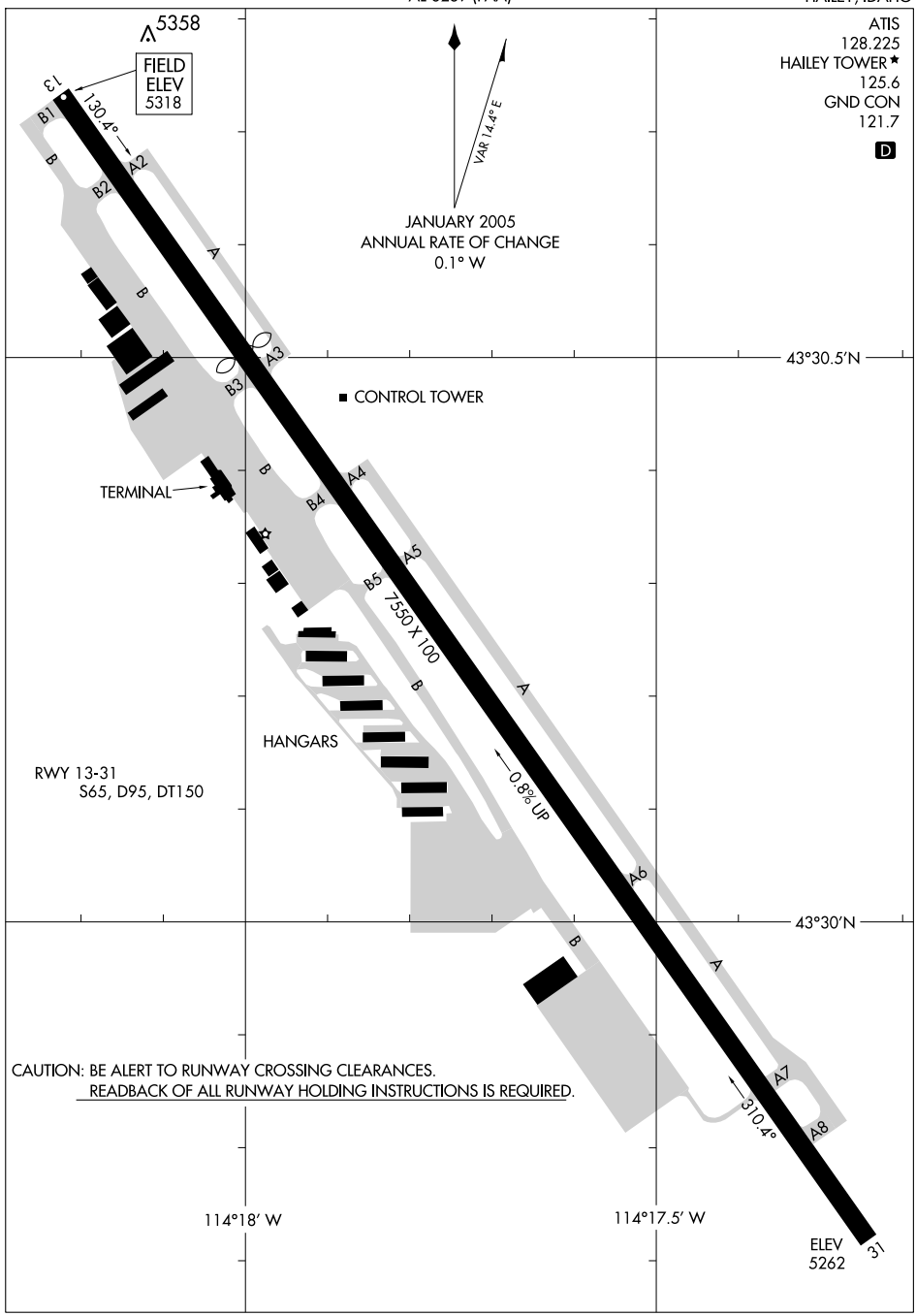
NW-1, 14 JAN 2010 to 11 FEB 2010

09013

AIRPORT DIAGRAM

AL-6239 (FAA)

HAILEY/ FRIEDMAN MEMORIAL (SUN)
HAILEY, IDAHO



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

AURELIA TWO DEPARTURE (RNAV)

GND CON
121.7
HAILEY TOWER ★
125.6
SALT LAKE CENTER
118.05 353.0
UNICOM 122.95

TAKE-OFF OBSTACLE NOTES

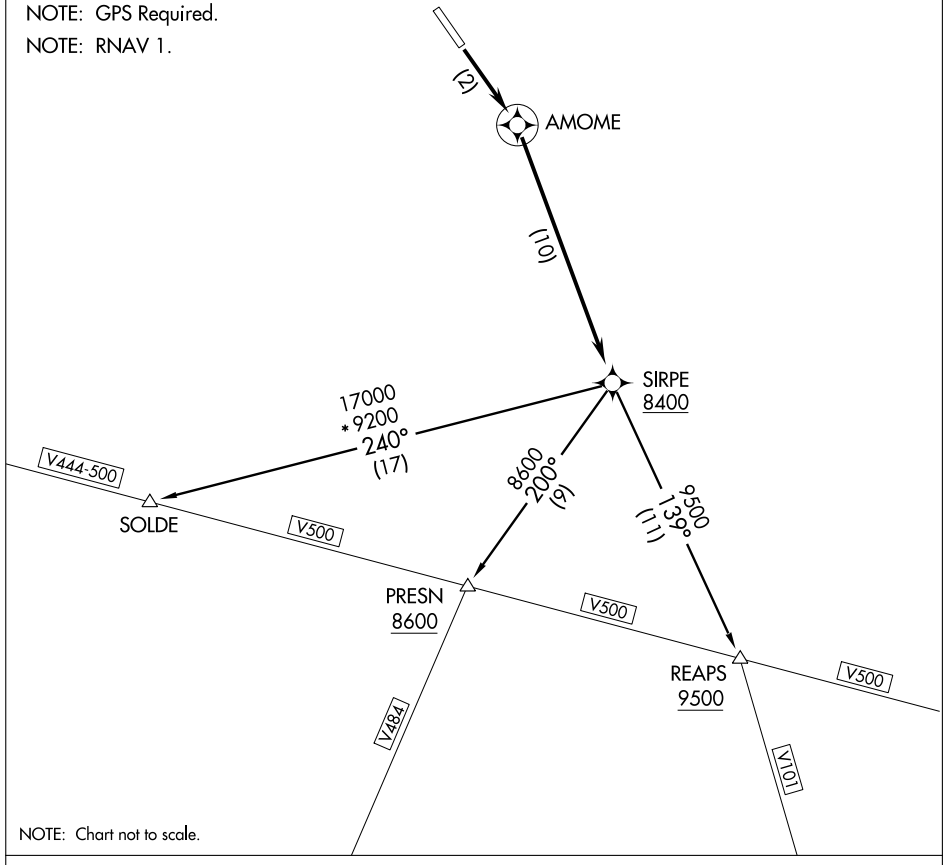
Rwy 13: Multiple trees beginning 763′ from DER, 3′ right of centerline, up to 100′ AGL/5345′ MSL.

TAKE-OFF MINIMUMS

Rwy 13: Standard with minimum climb of 400′ per NM to 6700.
ATC climb of 400′ per NM to 7300.
Rwy 31: NA, Obstacles.

NOTE: GPS Required.

NOTE: RNAV 1.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 13: Climb direct AMOME, then climbing right turn direct SIRPE to cross SIRPE; cross SIRPE at or above 8400, Thence....via (Transition).

PRESN TRANSITION (AUREL2.PRESN)

REAPS TRANSITION (AUREL2.REAPS)

SOLDE TRANSITION (AUREL2.SOLDE)

NDB/DME HLE 220 DME Chan 25	APP CRS 330°	Rwy Idg N/A TDZE N/A Apt Elev 5313

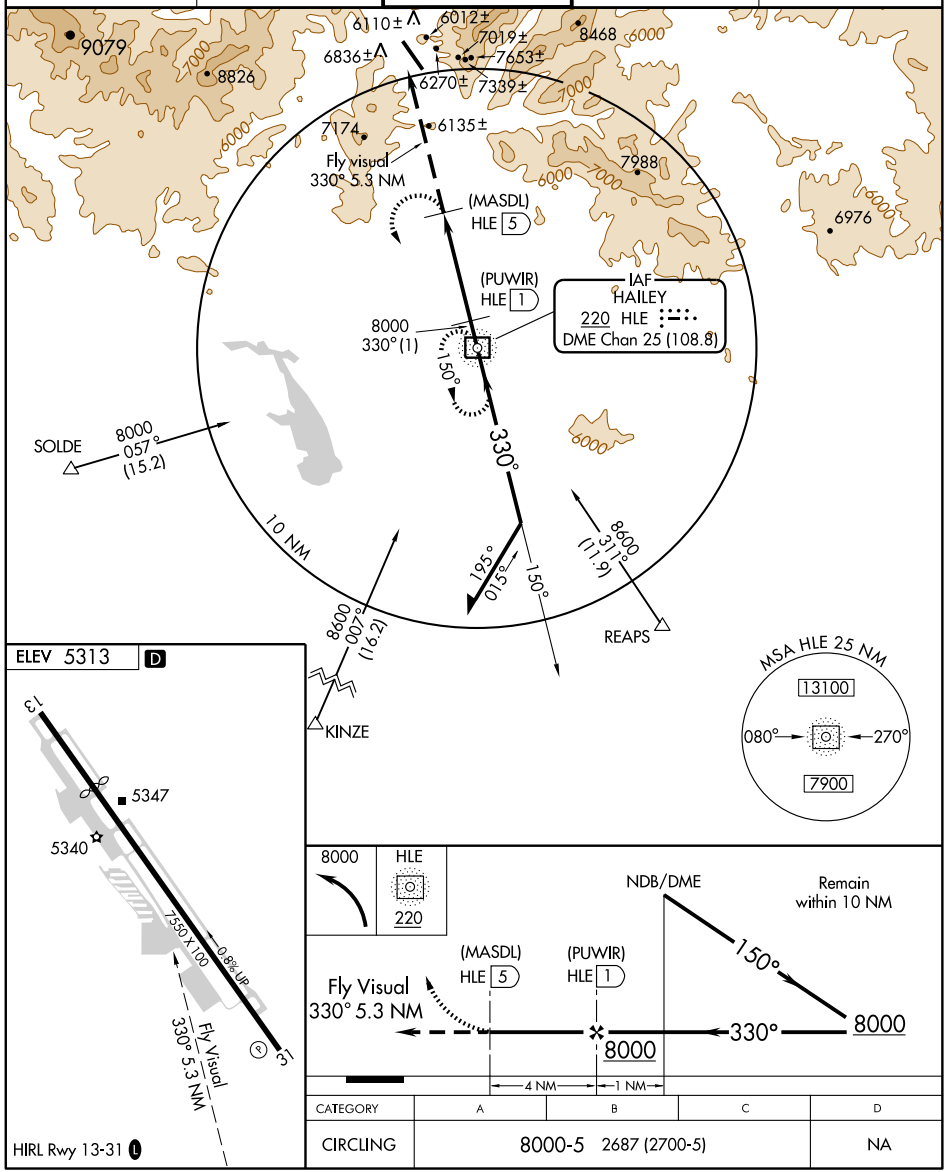
NDB/DME or GPS-A

HAILEY/FRIEDMAN MEMORIAL (SUN)

T NA — Occasional ADF needle swings away from the final approach course are to be expected north of missed approach point. When control tower closed, procedure not authorized. Procedure not authorized at night.

MISSED APPROACH: Left turn to 8000 direct HLE NDB/DME and hold.

ATIS	SALT LAKE CENTER	HAILEY TOWER ★	GND CON	UNICOM
128.225	118.05 353.0	125.6 (CTAF) L	121.7	122.95



CATEGORY	A	B	C	D
CIRCLING	8000-5 2687 (2700-5)			NA

APP CRS	Rwy Idg	6631
323°	TDZE	5290
	Apt Elev	5318

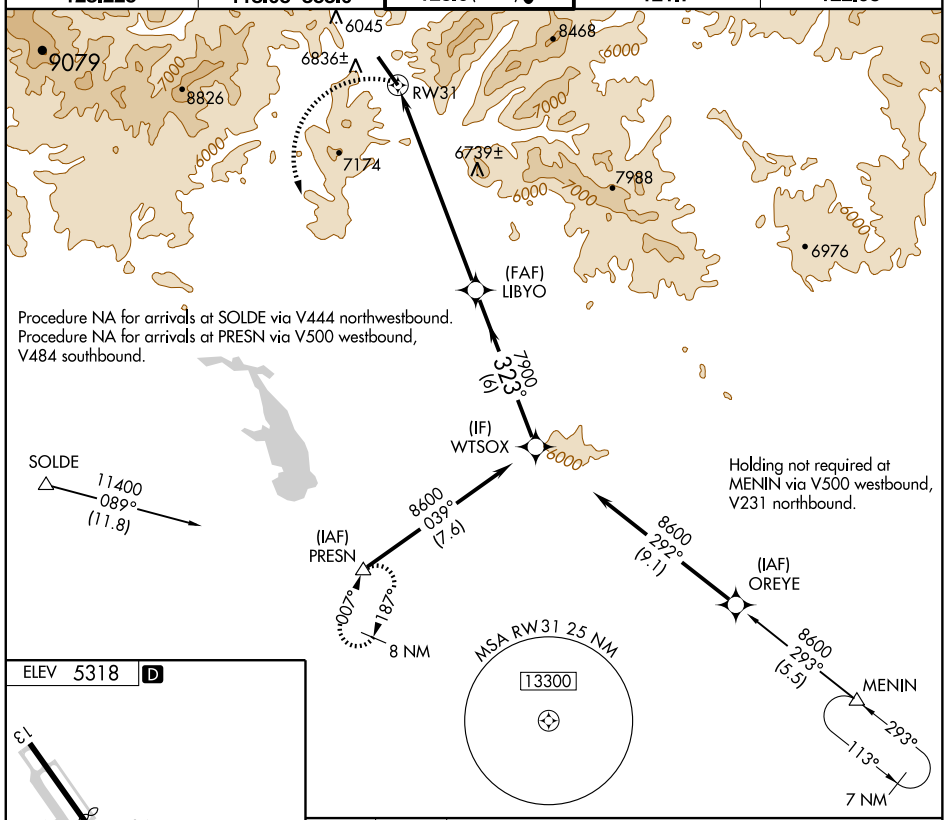
RNAV (GPS) W RWY 31

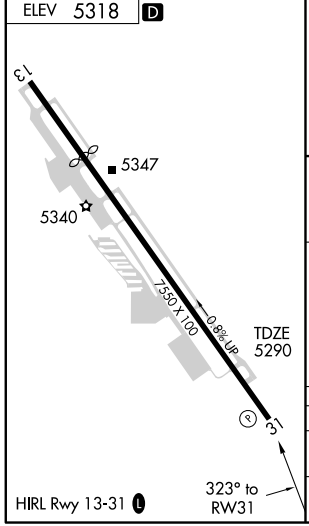
HAILEY/FRIEDMAN MEMORIAL (SUN)

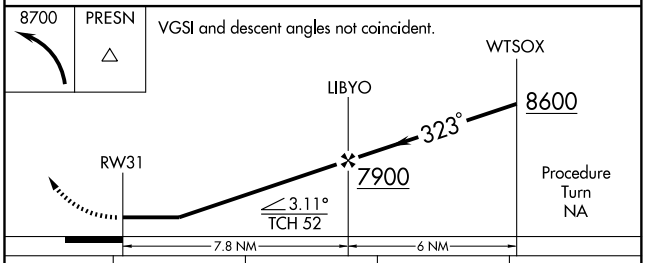
Circling NA at night.
Circling NA east of Rwy 13-31.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 8700 direct PRESN and hold.

ATIS	SALT LAKE CENTER	HAILEY TOWER ★	GND CON	UNICOM
128.225	118.05 353.0	125.6 (CTAF) L	121.7	122.95







CATEGORY	A	B	C	D
LNAV MDA	7080-1¼ 1790 (1800-1¼)	7080-1½ 1790 (1800-1½)	7080-3 1790 (1800-3)	NA
CIRCLING	7180-1¼ 1862 (1900-1¼)	7180-1½ 1862 (1900-1½)	7180-3 1862 (1900-3)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

HAILEY, IDAHO AL-6239 (FAA)

APP CRS	Rwy Idg	6631
314°	TDZE	5290
	Apt Elev	5318

RNAV (RNP) Y RWY 31

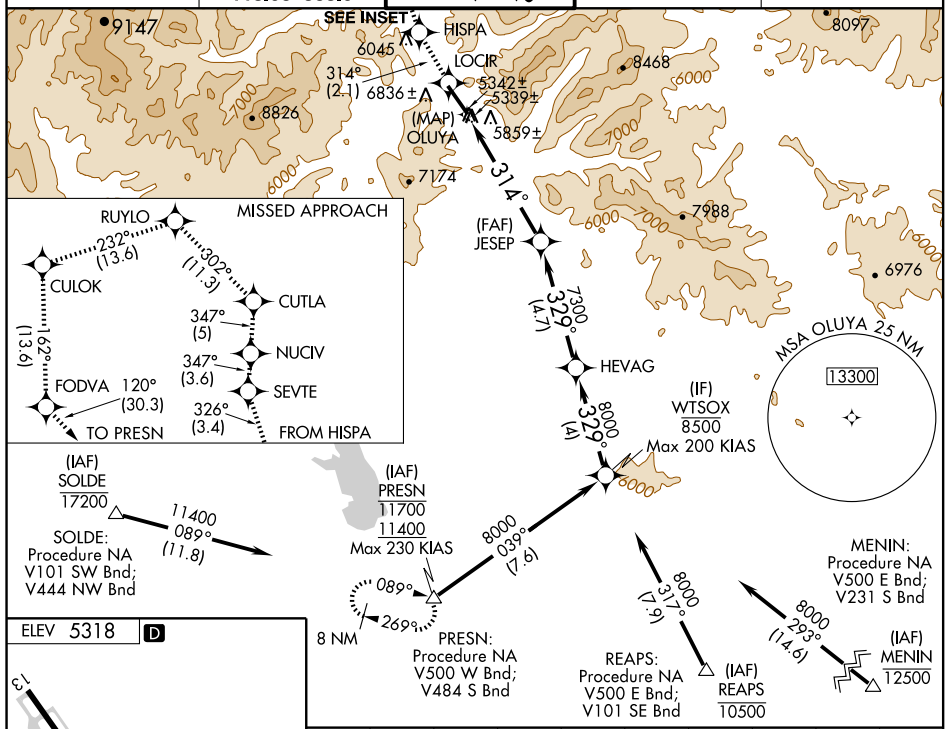
HAILEY/FRIEDMAN MEMORIAL (SUN)

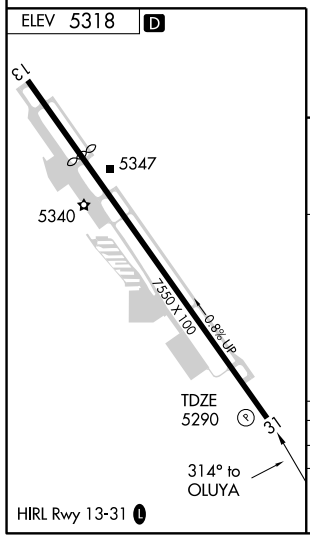
T NA

GPS required. When VGSI inoperative, procedure NA at night.
For uncompensated Baro-VNAV systems, procedure NA below -25°C (-14°F) or above 37°C (99°F).
Missed approach requires RNP less than 1.0 and minimum climb of 330 feet per NM to 14500. Visibility reduction by helicopters NA.
Final approach course offset 5.00°.

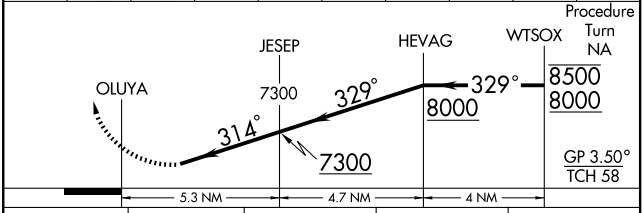
MISSED APPROACH: Climb to 15000 via 314° track to LOCIR, 314° track to HISPA, 326° track to SEVTE, 347° track to NUCIV, 347° track to CUTLA, 302° track to RUYLO, 232° track to CULOK, 162° track to FODVA, 120° track to PRESN and hold.

ATIS	SALT LAKE CENTER	HAILEY TOWER ★	GND CON	UNICOM
128.225	118.05 353.0	125.6 (CTAF) L	121.7	122.95





15000	LOCIR	HISPA	SEVTE	NUCIV	CUTLA	RUYLO	CULOK	FODVA	PRESN
	314° track	314° track	326° track	347° track	347° track	302° track	232° track	162° track	120° track



CATEGORY	A	B	C	D
RNP 0.30 DA	6264-3 974 (1000-3)			NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

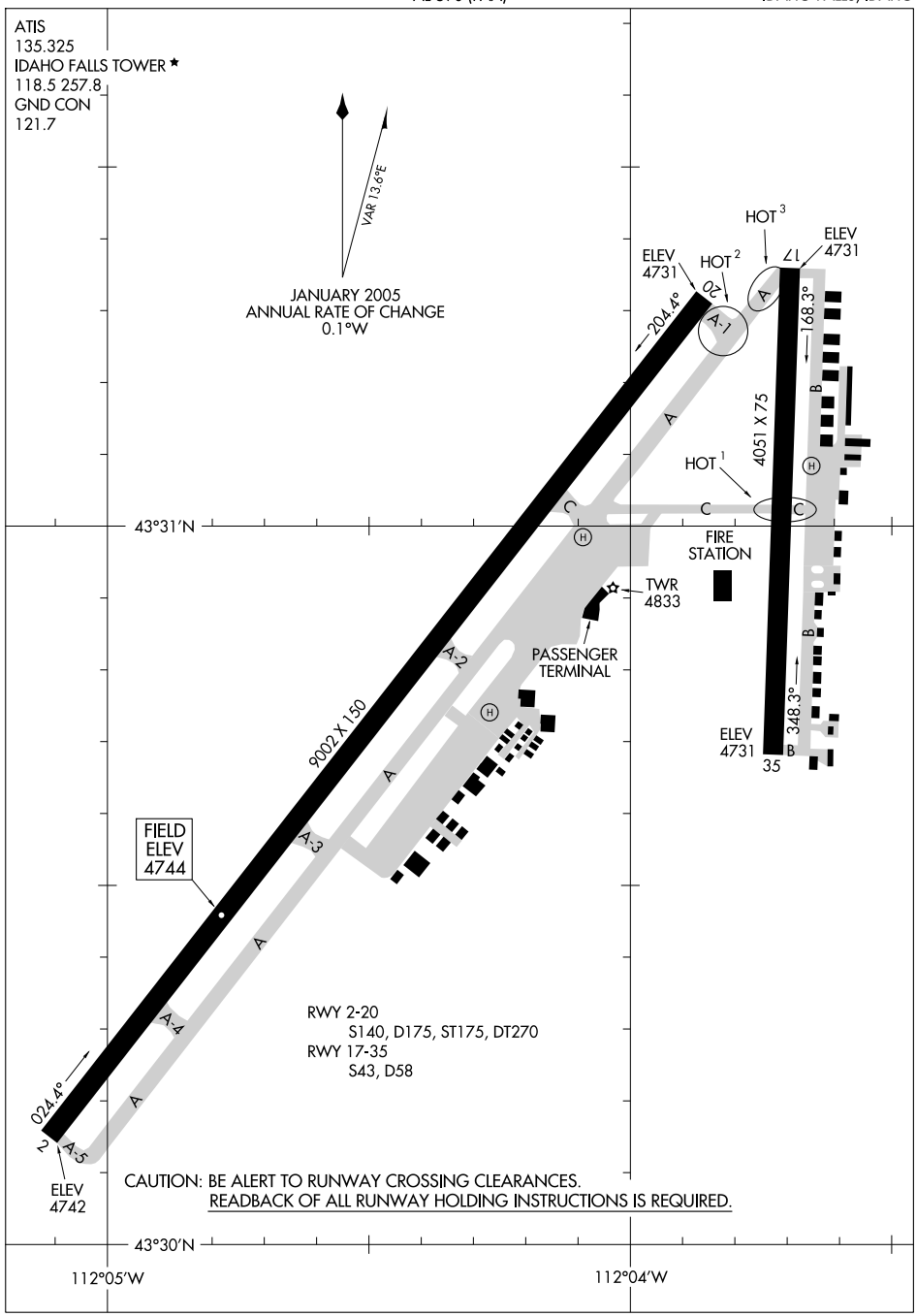
NW-1, 14 JAN 2010 to 11 FEB 2010

09183

AIRPORT DIAGRAM

AL-590 (FAA)

IDAHO FALLS RGNL (IDA)
IDAHO FALLS, IDAHO



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-IDA	APP CRS	Rwy Idg	9002
111.1	203°	TDZE	4735
Chan 48		Apt Elev	4744

ILS or LOC RWY 20

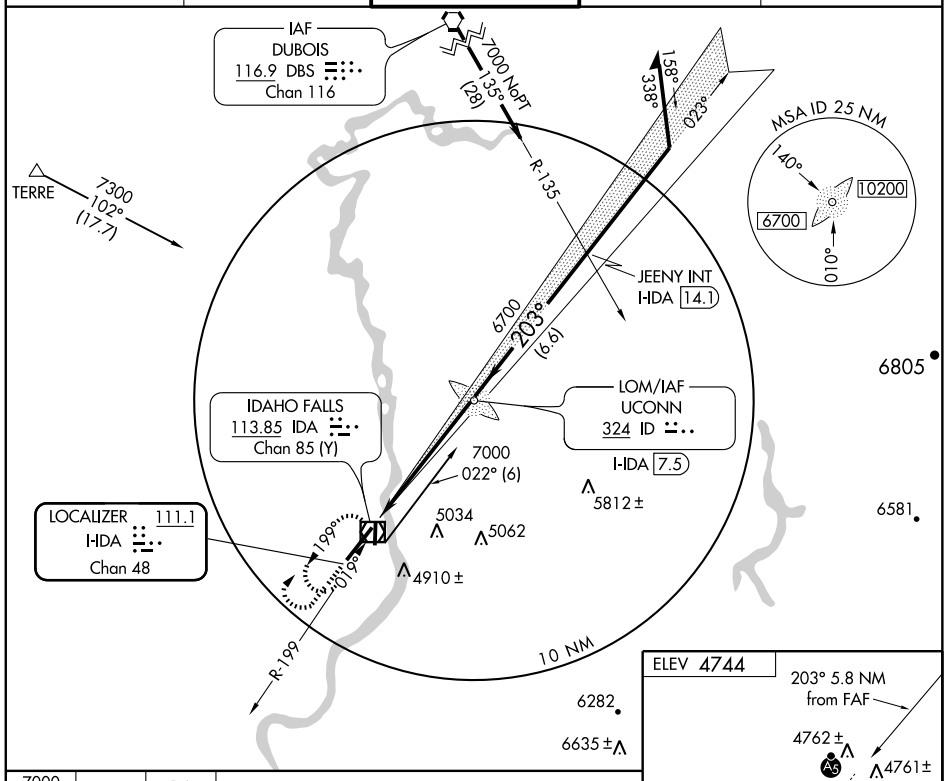
IDAHO FALLS RGNL (IDA)

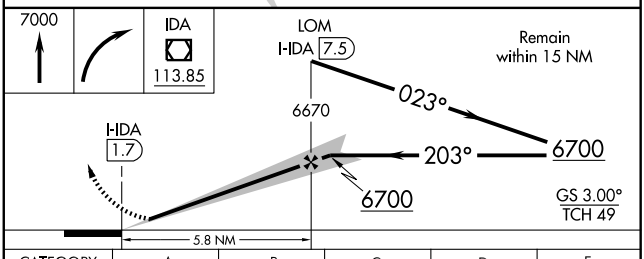
T A *Visibility CAT A/B/C/D, RVR 1800 authorized with the use of FD or AP or HUD to DA.

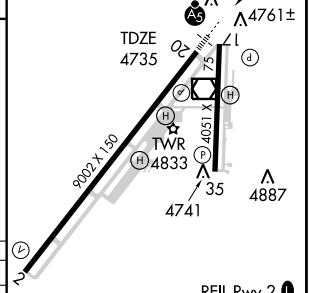
MALSR

MISSED APPROACH: Climb to 7000, then right turn direct IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95







REIL Rwy 2 L
HIRL Rwy 2-20 L
MIRL Rwy 17-35

CATEGORY	A	B	C	D	E
S-ILS 20	*4935/24 200 (200-½)				
S-LOC 20	5140/24 405 (400-½)		5140/40 405 (400-¾)		5140/50 405 (400-1)
CIRCLING	5200-1 456 (500-1)	5220-1 476 (500-1)	5260-1½ 516 (600-1½)	5340-2 596 (600-2)	5420-2½ 676 (700-2½)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-IDA	APP CRS	Rwy Idg	9002
111.1	023°	TDZE	4744
Chan 48		Apt Elev	4744

LOC BC RWY 2
IDAHO FALLS RGNL (IDA)

MISSED APPROACH: Climb to 6000 then climbing left turn to 7000 direct IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95

ADF or DME REQUIRED

MSA SWU 25 NM
180° 8900
7800 270°
360° 10000

IDAHO FALLS
113.85 IDA
Chan 85 (Y)

LOCALIZER 111.1
I-IDA
Chan 48

IAF
SWEDEN
350 SWU
I-IDA 5.2

ROCCA
7300
067°
(13.2)

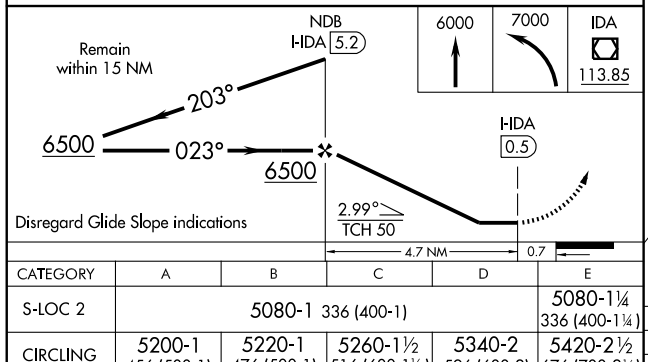
199°
019°
R-199
7000
205° (6.8)
4829±
5034
4910±
5062
5812±
6260±
6356±
6282
6235±
6635±
6687±
5904±
6809±
7154±
6980±
7397±
7486

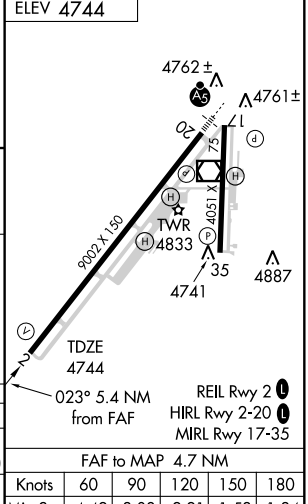
023°
248°
068°
203°
R-014
10 NM

6500 NoPT to NDB
014° (31.1) and
LOC (8.9)

IAF
POCATELLO
112.6 PIH
Chan 73

BACK COURSE





CATEGORY	A	B	C	D	E
S-LOC 2	5080-1 336 (400-1)				5080-1¼ 336 (400-1¼)
CIRCLING	5200-1 456 (500-1)	5220-1 476 (500-1)	5260-1½ 516 (600-1½)	5340-2 596 (600-2)	5420-2½ 676 (700-2½)

FAF to MAP	4.7 NM				
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM ID	APP CRS	Rwy Idg	9002
324	204°	TDZE	4735
		Apt Elev	4744

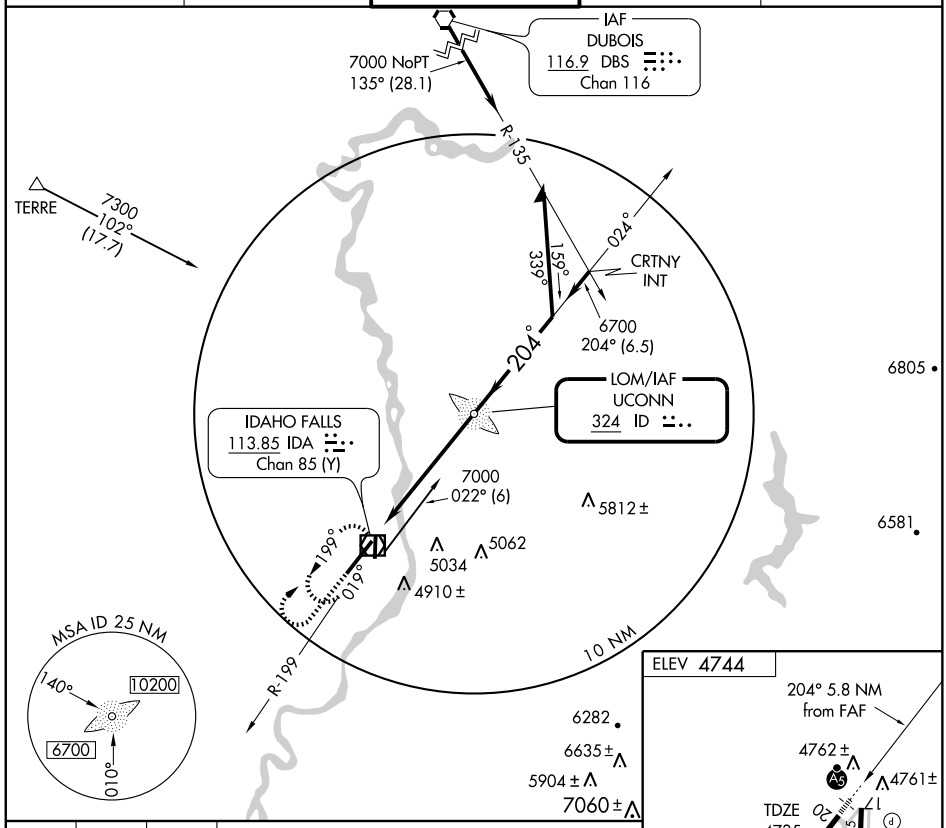
NDB RWY 20

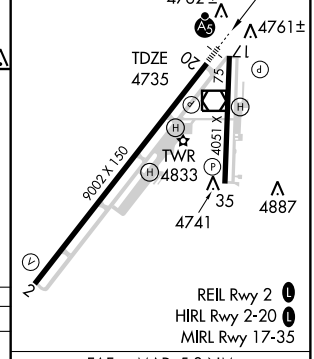
IDAHO FALLS RGNL (IDA)

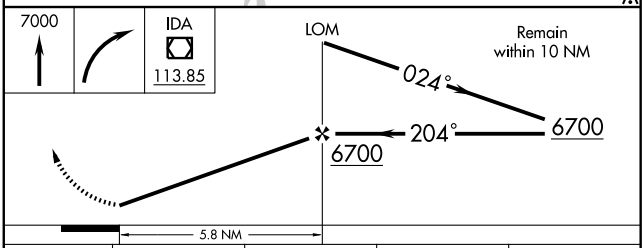
MALSR

MISSED APPROACH: Climb to 7000 then right turn direct IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER ★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95







CATEGORY	A	B	C	D
S-20	5220/40 485 (500-¾)			5220/60 485 (500-1¼)
CIRCLING	5220-1 476 (500-1)		5260-1½ 516 (600-1½)	5340-2 596 (600-2)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NW-1, 14 JAN 2010 to 11 FEB 2010

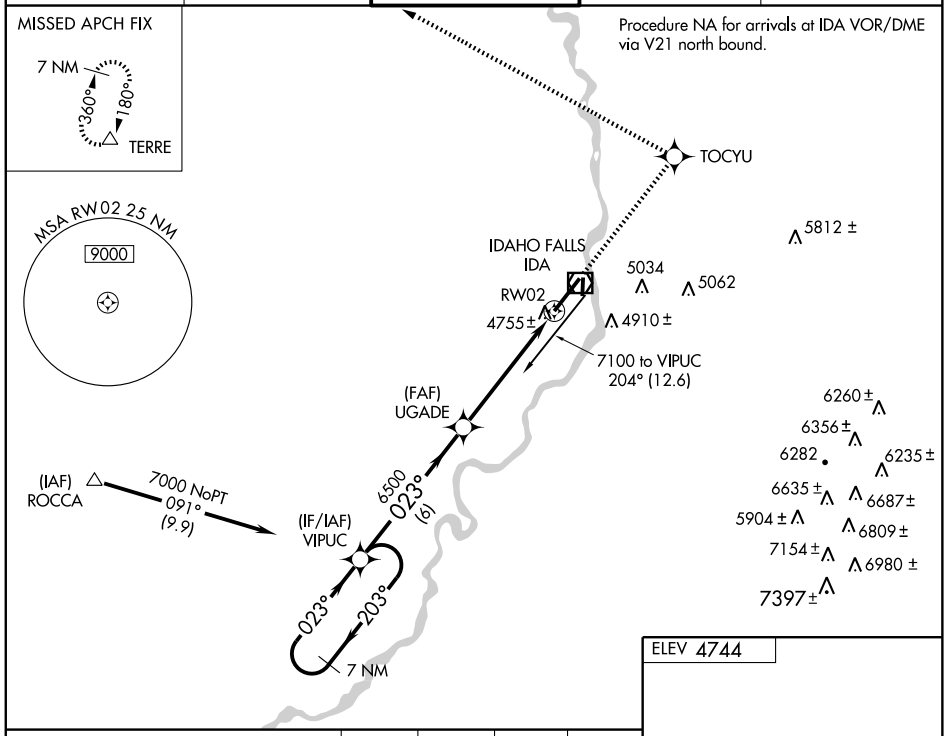
WAAS	APP CRS	Rwy Idg	9002
CH 97501	023°	TDZE	4744
W02A		Apt Elev	4744

RNAV (GPS) RWY 2
IDAHO FALLS RGNL (IDA)

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (103°F).
When VGSI inoperative, circling Rwy 35 NA at night.

MISSED APPROACH: Climb to 7500 direct TOCYU and left turn via 284° track to TERRE and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95



CATEGORY	A	B	C	D
LPV DA	4994-¾ 250 (300-¾)			
LNAV/VNAV DA	5135-1¼ 391 (400-1¼)			
LNAV MDA	5100-1 356 (400-1)			5100-1¼ 356 (400-1¼)
CIRCLING	5200-1 456 (500-1)	5220-1 476 (500-1)	5260-1½ 516 (600-1½)	5340-2 596 (600-2)

REIL Rwy 2 L
HIRL Rwy 2-20 L
MIRL Rwy 17-35

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 40111 W20A	APP CRS 203°	Rwy Idg 9002 TDZE 4735 Apt Elev 4744

RNAV (GPS) RWY 20

IDAHO FALLS RGNL (IDA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP-0.3 NA.
VDP and Baro-VNAV NA when using Rexburg-Madison County altimeter setting. When local altimeter setting not received, use Rexburg-Madison County altimeter setting and increase all DA 68 feet and all MDA 80 feet and increase LNAV/VNAV visibility all Cats ¼ mile. When VGSI inoperative, circling Rwy 35 NA at night.
For inoperative MALSR increase visibility LNAV Cat D to 1¼ mile.
For inoperative MALSR when using Rexburg-Madison County altimeter setting increase LPV visibility all Cats to 1 mile.

MALSR

MISSED APPROACH: Climb to 7000 direct VIPUC and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER*	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95

Procedure NA for arrival on DBS VORTAC airway radials 098 CW 180.

(IAF) DUBOIS DBS

7600 NoPT 136° (28.1)

(IAF) SABAT

7600 NoPT 191° (22.5)

7 NM

023° 203°

(IF/IAF) YAGUP

7600 NoPT 282° (6)

ZEKOL

6700 203° (6.2)

(FAF) WOTES

4989

MSA RW 20 25 NM

9200

6805

8200 282° (9.9)

(IAF) LUDIC

6581

MISSED APCH FIX

VIPUC

023° 203°

7 NM

4771±

7600 to YAGUP 022° (12.2)

5812 ±

RW20

5034

IDAHO FALLS IDA

4802

5062

4910±

ELEV 4744

203° to RW20

4762 ±

4761±

TDZE 4735

TWR 4833

4051 X 75

9002 X 150

35

4741

4887

7000 VIPUC

*LNAV only

YAGUP

7 NM Holding Pattern

WOTES

023° 7600

203°

*1.1 NM to RW20

RW20

203°

6700

GS 3.00°

TCH 49

1.1 4.8 NM 6.2 NM

CATEGORY	A	B	C	D
LPV DA	4985/24 250 (300-½)			
LNAV/VNAV DA	5092/40 357 (400-¾)			
LNAV MDA	5140/24 405 (400-½)		5140/40 405 (400-¾)	5140/50 405 (400-1)
CIRCLING	5200-1 456 (500-1)	5220-1 476 (500-1)	5260-1½ 516 (600-1½)	5340-2 596 (600-2)

REIL Rwy 2 L
HIRL Rwy 2-20 L
MIRL Rwy 17-35

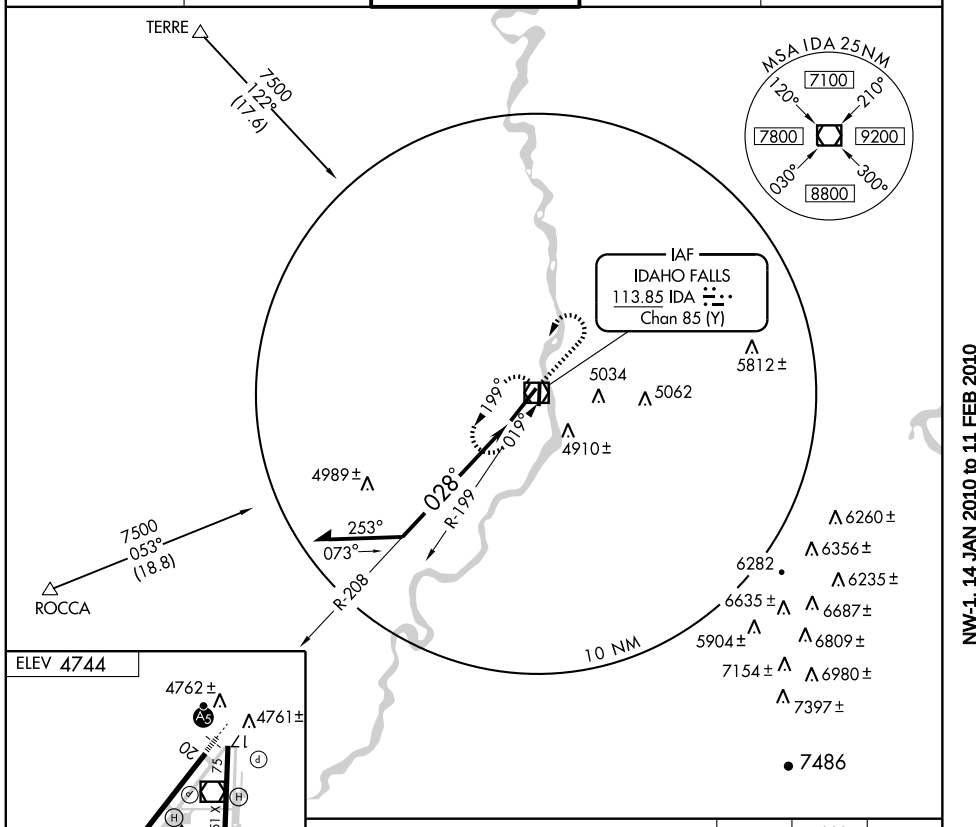
NW-1, 14 JAN 2010 to 11 FEB 2010

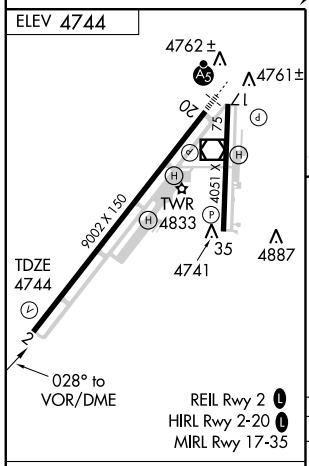
VOR/DME IDA	APP CRS	Rwy Idg	9002
113.85	028°	TDZE	4744
Chan 85 (Y)		Apt Elev	4744

VOR RWY 2
IDAHO FALLS RGNL (IDA)

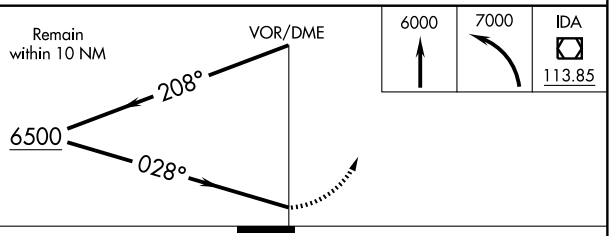
MISSED APPROACH: Climb to 6000 then climbing left turn to 7000 direct IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER ★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-2	5300-1	556 (600-1)	5300-1½ 556 (600-1½)	5300-1¾ 556 (600-1¾)
CIRCLING	5300-1	556 (600-1)	5300-1½ 556 (600-1½)	5340-2 596 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME IDA	APP CRS	Rwy Idg	9002
113.85	192°	TDZE	4735
Chan 85 (Y)		Apt Elev	4744

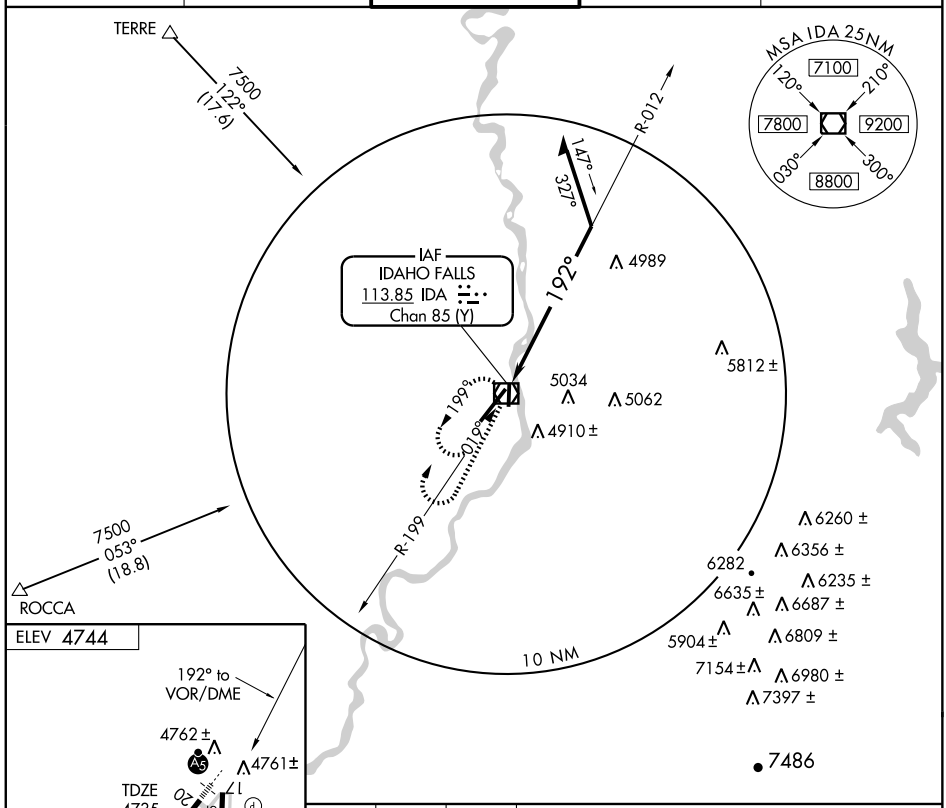
VOR RWY 20
IDAHO FALLS RGNL (IDA)

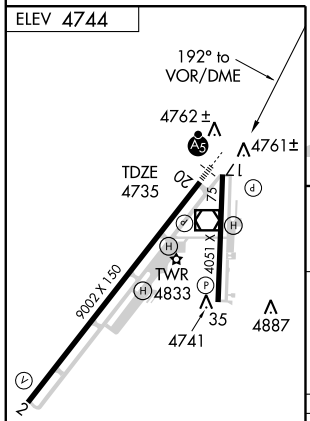
When local altimeter setting not received, use Rexburg-Madison County altimeter setting and increase all MDA 80 feet and increase all Cat B visibilities ¼ mile and increase all Cat C and D visibilities ½ mile.
When VGSI inoperative, circling Rwy 35 NA at night.
VDP NA when using Rexburg-Madison County altimeter setting.

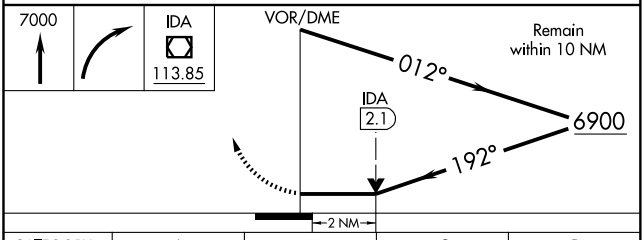
MALSR

MISSED APPROACH: Climb to 7000 then right turn direct IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	IDAHO FALLS TOWER ★	GND CON	UNICOM
135.325	128.35 239.25	118.5 (CTAF) L 257.8	121.7	122.95







CATEGORY	A	B	C	D
S-20	5400/24 665 (700-½)		5400/60 665 (700-1¼)	5400-1½ 665 (700-1½)
CIRCLING	5400-1 656 (700-1)		5400-1¾ 656 (700-1¾)	5400-2 656 (700-2)

REIL Rwy 2 L
HIRL Rwy 2-20 L
MIRL Rwy 17-35

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5001
086°	TDZE	4019
	Apt Elev	4053

RNAV (GPS) RWY 9

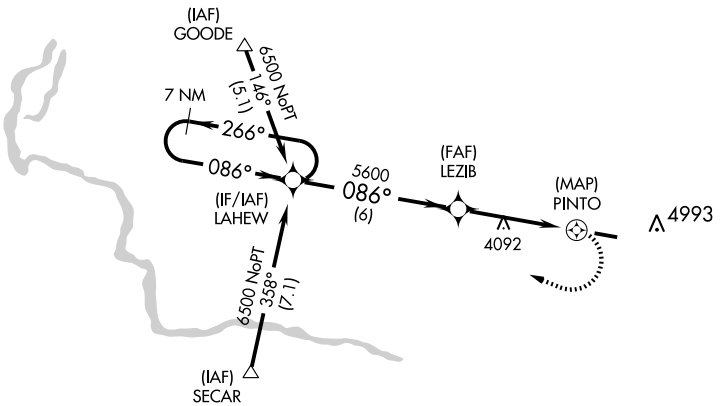
JEROME COUNTY (JER)

Circling NA north of Rwy 9-27. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Twin Falls altimeter setting and increase all MDA 60 feet, and increase LNAV Cat. D visibility ¼ mile.

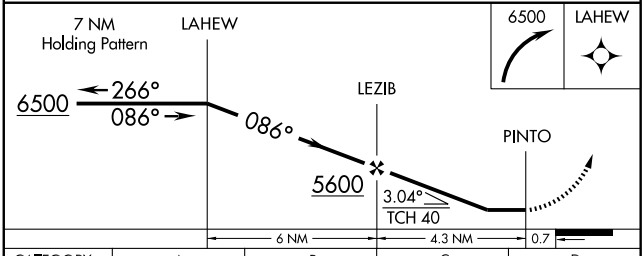
MISSED APPROACH: Climbing right turn to 6500 direct LAHEW and hold.

ASOS	TWIN FALLS APP CON ★	SALT LAKE CENTER	UNICOM
135.225	126.7 353.75	118.05 363.0	122.8 (CTAF) L

Procedure NA for arrivals at GOODE via V4 northwest bound and V293 northwest bound.



Procedure NA for arrivals at SECAR via V253 southeast bound.



ELEV 4053

CATEGORY	A	B	C	D
LNAV MDA	4420-1 401 (400-1)		4420-1¼ 401 (400-1¼)	
CIRCLING	4480-1 427 (500-1)	4560-1 507 (600-1)	4560-1½ 507 (600-1½)	4620-2 567 (700-2)

MIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5001
CH 90514	266°	TDZE	4053
W27A		Apt Elev	4053

RNAV (GPS) RWY 27

JEROME COUNTY (JER)

Circling NA north of Rwy 9-27. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Twin Falls altimeter setting and increase all DA 49 feet, and all MDA 60, and increase LPV all Cats. visibility ¼ mile.

MISSED APPROACH: Climb to 6500 direct LAHEW and hold.

ASOS	TWIN FALLS APP CON ★	SALT LAKE CENTER	UNICOM
135.225	126.7 353.75	118.05 363.0	122.8 (CTAF) L

MISSED APCH FIX
7 NM
266°
086°
LAHEW

(IAF) SHONE
6100
214°
(7.1)

RW27
4993
5700
266°
(6.1)
(IF) FANCO
(FAF) CITCO

6100
281°
(16.4)
(IAF) BURLEY
BYI

MSA RW27 25 NM
8400

6100
357°
(10.6)
(IAF) APGUH

Procedure NA for arrivals at BYI VOR/DME via V4 eastbound and V101 southeast bound.

9700
318°
(23.9)

Procedure NA for arrivals at DRYAD via V484 southeast bound.

DRYAD

ELEV 4053

1.8% UP
5001 X 75
TDZE 4053
27
266° to RW27

6500
LAHEW

FANCO
CITCO
6100
266°
RW27
5700
GS 3.00°
TCH 58
Procedure Turn NA
4.9 NM
6.1 NM

CATEGORY	A	B	C	D
LPV DA	4434-1¼ 381 (400-1¼)			
LNAV MDA	5300-1¼ 1247 (1300-1¼)	5300-1½ 1247 (1300-1½)	5300-3 1247 (1300-3)	
CIRCLING	5300-1¼ 1247 (1300-1¼)	5300-1½ 1247 (1300-1½)	5300-3 1247 (1300-3)	

MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

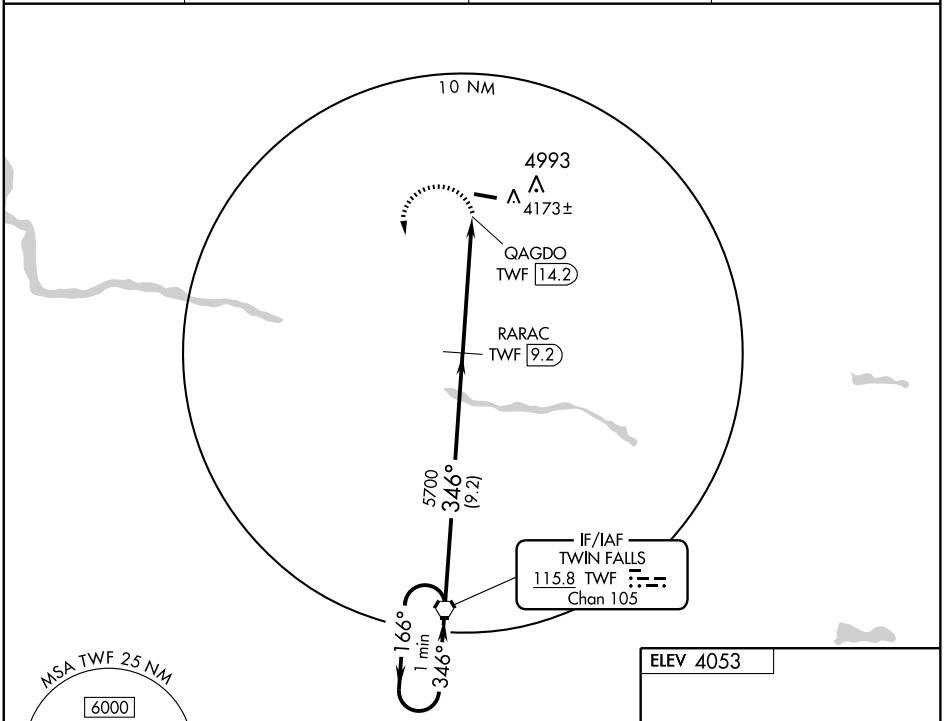
VORTAC TWF	APP CRS	Rwy Idg	N/A
115.8	346°	TDZE	N/A
Chan 105		Apt Elev	4053

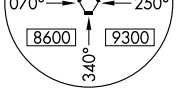
VOR/DME-A
JEROME COUNTY (JER)

Circling NA north of Rwy 9-27. When local altimeter setting not received, use Twin Falls altimeter setting and increase all MDA 60 feet.

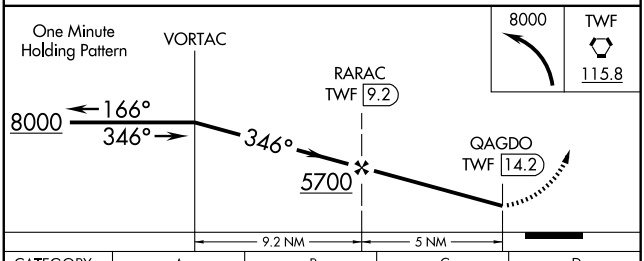
MISSED APPROACH: Climbing left turn to 8000 direct TWF VORTAC and hold, continue climb-in-hold to 8000.

ASOS	TWIN FALLS APP CON ★	SALT LAKE CENTER	UNICOM
135.225	126.7 353.75	118.05 363.0	122.8 (CTAF) L



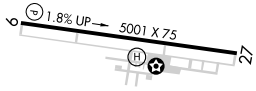


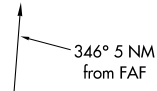
NoPT for arrival on TWF VORTAC via V142 westbound and V269 southwest bound and V293 northbound.



CATEGORY	A	B	C	D
CIRCLING	4580-1 527 (600-1)		4580-1½ 527 (600-1½)	4620-2 567 (600-2)

ELEV 4053





MIRL Rwy 8-26 L

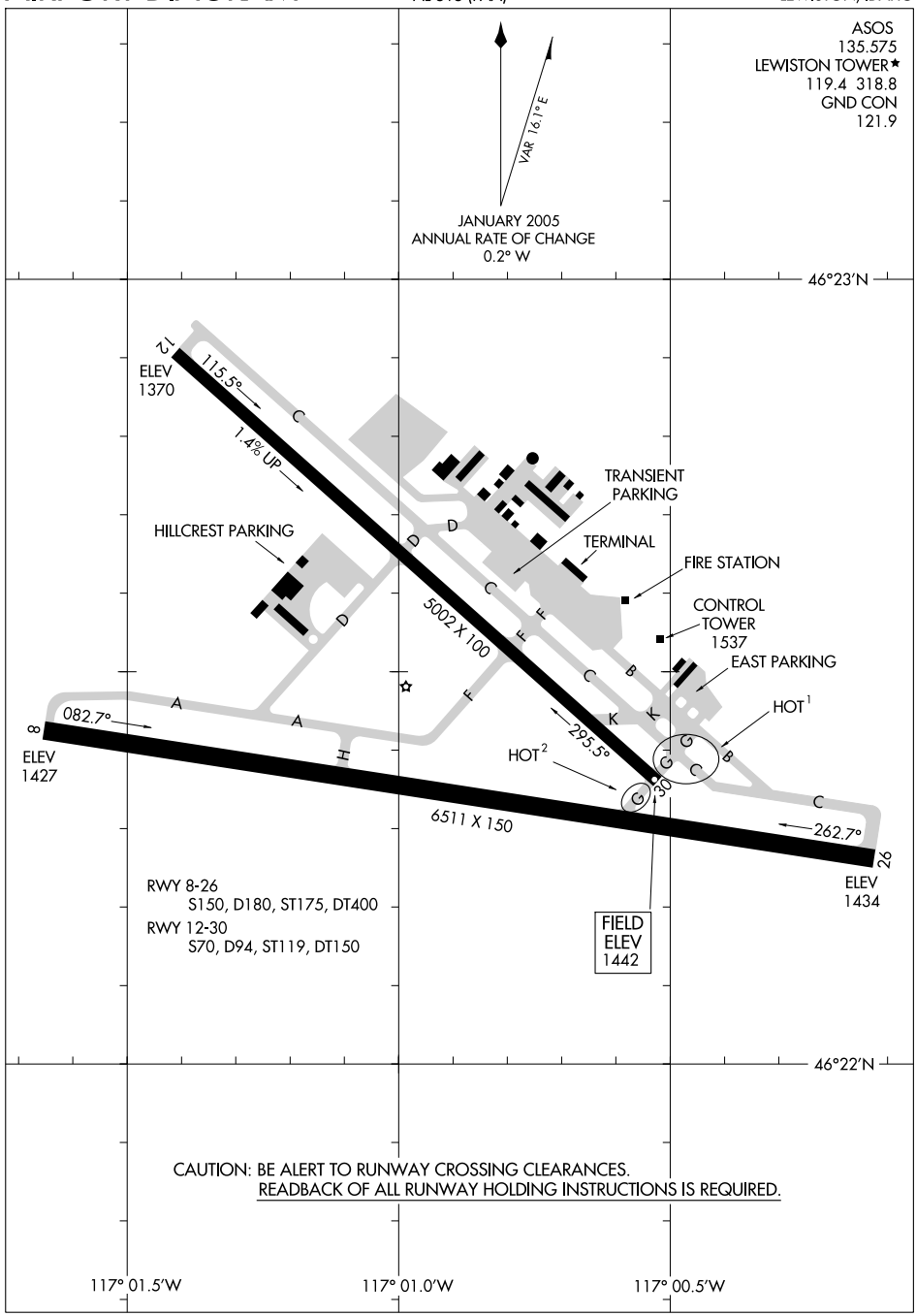
NW-1, 14 JAN 2010 to 11 FEB 2010

09295

AIRPORT DIAGRAM

AL-515 (FAA)

LEWISTON-NEZ PERCE COUNTY (LWS)
LEWISTON, IDAHO



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-LWS	APP CRS	Rwy Idg	6511
109.7	264°	TDZE	1442
		Apt Elev	1442

ILS RWY 26

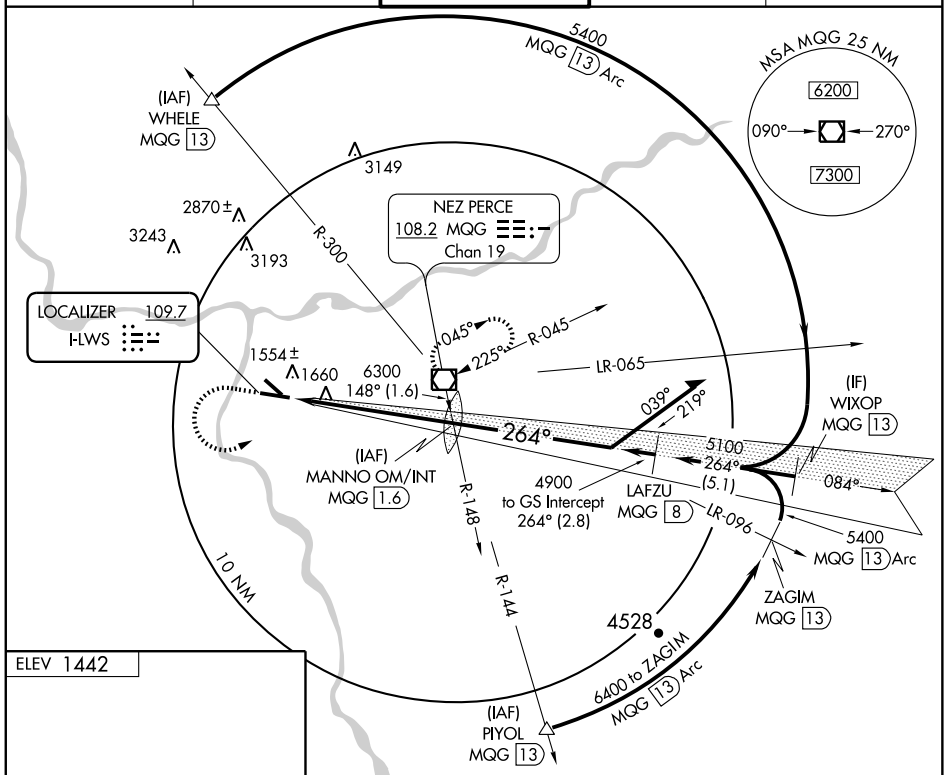
LEWISTON-NEZ PERCE COUNTY (LWS)

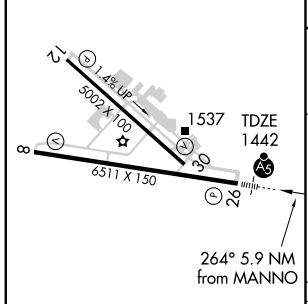
T When local altimeter setting not received, procedure NA.
A Autopilot coupled approach NA below 2500.
Circling requires descent on GS to CMDA.

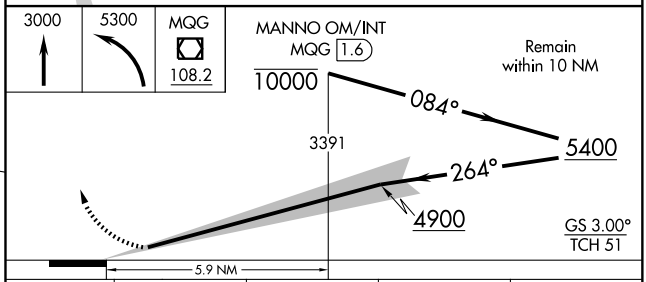
MALSR

MISSED APPROACH: Climb to 3000 then climbing left turn to 5300 direct MQG VOR/DME and hold, continue climb-in-hold to 5300.

ASOS	SEATTLE CENTER	LEWISTON TOWER*	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) L 318.8	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 26	1642-½ 200 (200-½)			
CIRCLING	1900-1 458 (500-1)	1920-1 478 (500-1)	1960-1½ 518 (600-1½)	2160-2¼ 718 (800-2¼)

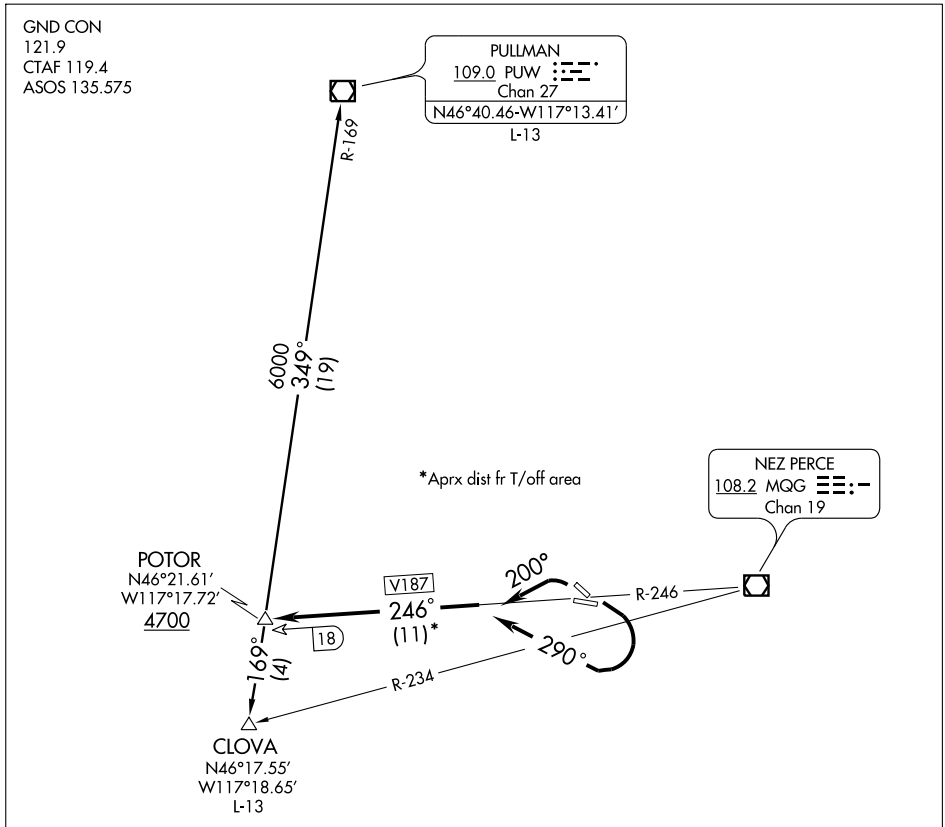
REIL Rwys 8 and 12 L
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 14 JAN 2010 to 11 FEB 2010

POTOR TWO DEPARTURE

SL-515 (FAA)

LEWISTON-NEZ PERCE COUNTY (LWS)
LEWISTON, IDAHO



NOTE: Departure may be restricted to cross POTOR INT at 5000.

NOTE: Minimum climb required- Rwys 26 and 29-300′/NM to 4700′ (750 FPM/150K IAS 1000 FPM/200K IAS).
Rwys 8 and 11-270′/NM to 4700′ (675 FPM/150K IAS, 900 FPM/200K IAS) or 4600′ ceiling and three miles visibility.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8, 11: Turn right heading 290°. Thence....

TAKE-OFF RUNWAYS 26, 29: Turn left heading 200°. Thence....

....Intercept and proceed via MQG R-246 (V187) to POTOR INT. Thence via (assigned route) or (transition).

CLOVA TRANSITION (POTOR2.CLOVA): From over POTOR INT via PUW R-169 to CLOVA INT.

PULLMAN TRANSITION (POTOR2.PUW): From over POTOR INT via PUW R-169 to PUW VOR/DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	6511
CH 97600	084°	TDZE	1440
W08A		Apt Elev	1442

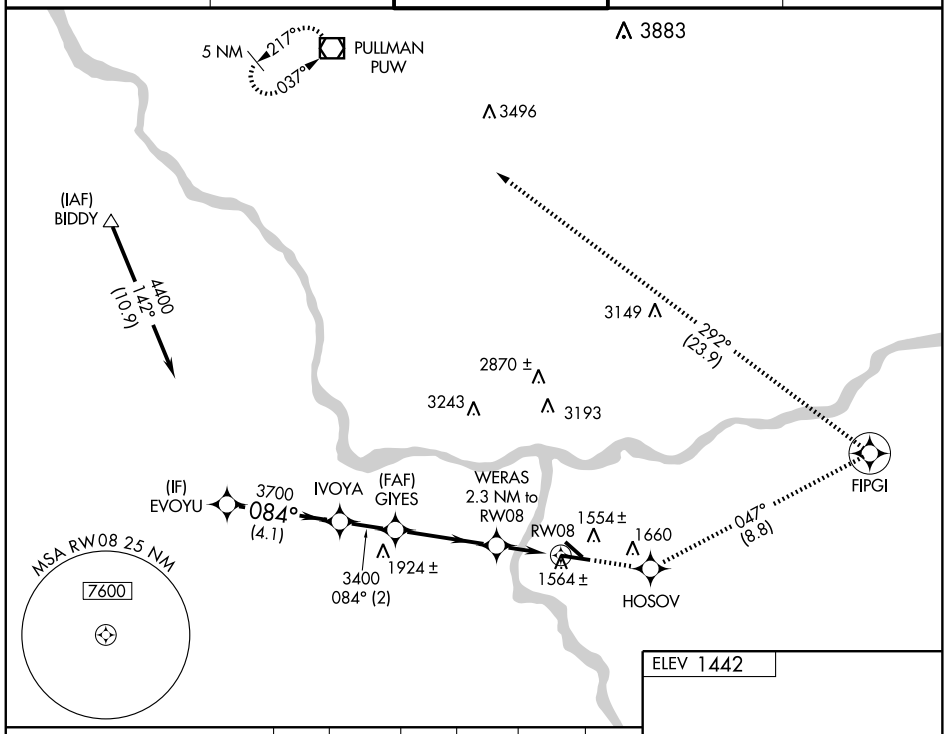
RNAV (GPS) RWY 8

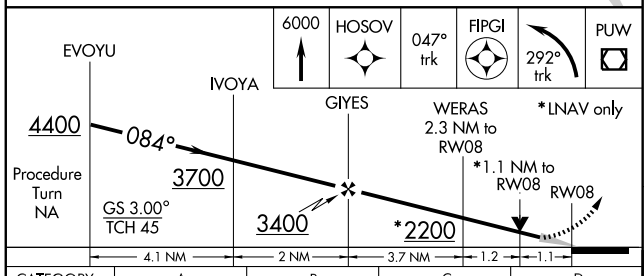
LEWISTON-NEZ PERCE COUNTY (LWS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.

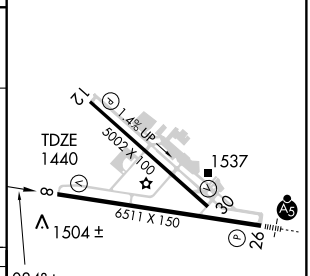
MISSED APPROACH: Climb to 6000 direct HOSOV and via 047° track to FIPGI, and left turn via 292° track to PUW VOR/DME and hold.

ASOS	SEATTLE CENTER	LEWISTON TOWER *	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) 318.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1690-1 250 (300-1)			
LNAV/VNAV DA	1831-1½ 391 (400-1½)			
LNAV MDA	1820-1 380 (400-1)			1820-1¼ 380 (400-1¼)
CIRCLING	1900-1 458 (500-1)	1920-1 478 (500-1)	1960-1½ 518 (600-1½)	2160-2¼ 718 (800-2¼)



REIL Rwys 8 and 12(L)
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5002
CH 56500	117°	TDZE	1415
W12A		Apt Elev	1442

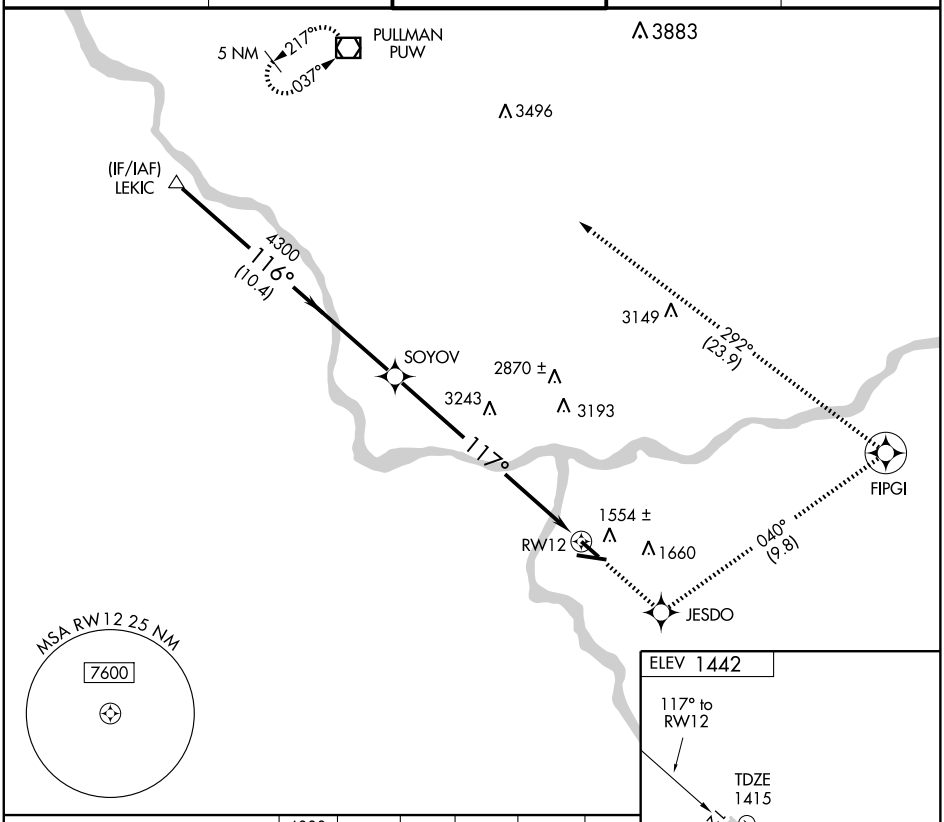
RNAV (GPS) RWY 12

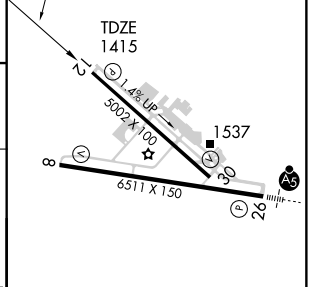
LEWISTON-NEZ PERCE COUNTY (LWS)

Circling requires descent on glidepath to CMDA.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6000 direct JESDO and via 040° track to FIPGI, and left turn via 292° track to PUW VOR/DME and hold.

ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) 318.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1748-1¼ 333 (400-1¼)			
CIRCLING	1900-1¼ 458 (500-1¼)	1920-1¼ 478 (500-1¼)	1960-1½ 518 (600-1½)	2160-2¼ 718 (800-2¼)

REIL Rwys 8 and 12(L)
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	6511
CH 78012	264°	TDZE	1442
W26A		Apt Elev	1442

RNAV (GPS) RWY 26

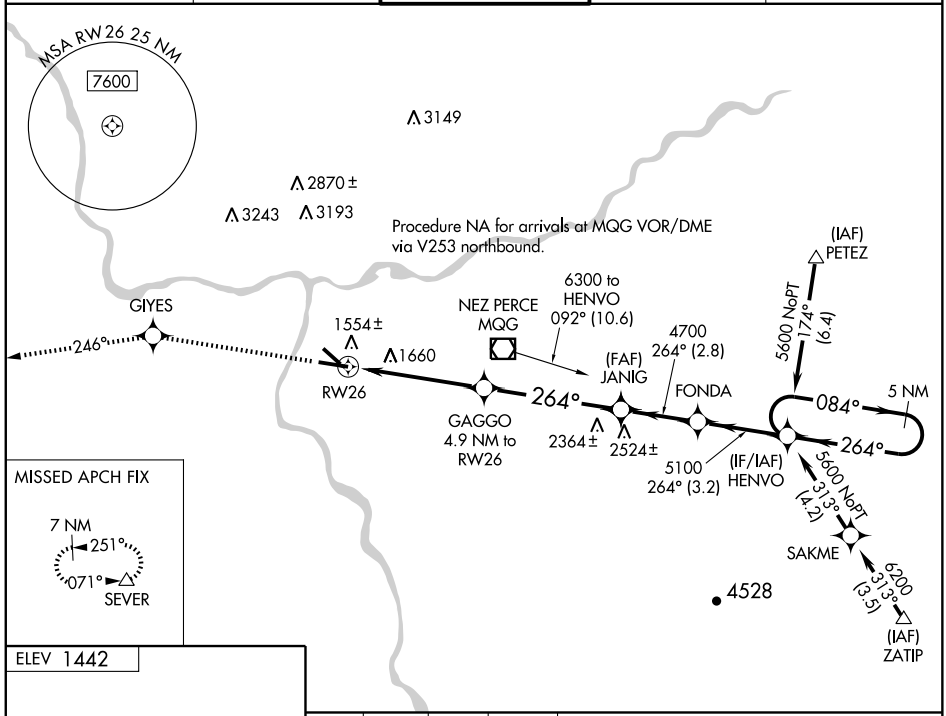
LEWISTON-NEZ PERCE COUNTY (LWS)

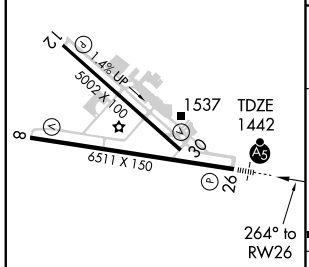
When local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

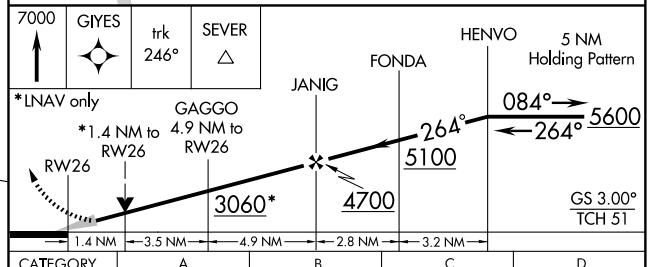
MALSR

MISSED APPROACH: Climb to 7000 direct GIYES and via 246° track to SEVER and hold, continue climb-in-hold to 7000.

ASOS	SEATTLE CENTER	LEWISTON TOWER★	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) 318.8	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	1642-½ 200 (200-½)			
LNAV/VNAV DA	1962-1¼ 520 (600-1¼)			
LNAV MDA	1920-½ 478 (500-½)		1920-¾ 478 (500-¾)	1920-1 478 (500-1)
CIRCLING	1920-1 478 (500-1)		1960-1½ 518 (600-1½)	2160-2¼ 718 (800-2¼)

REIL Rwys 8 and 12
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 14 JAN 2010 to 11 FEB 2010

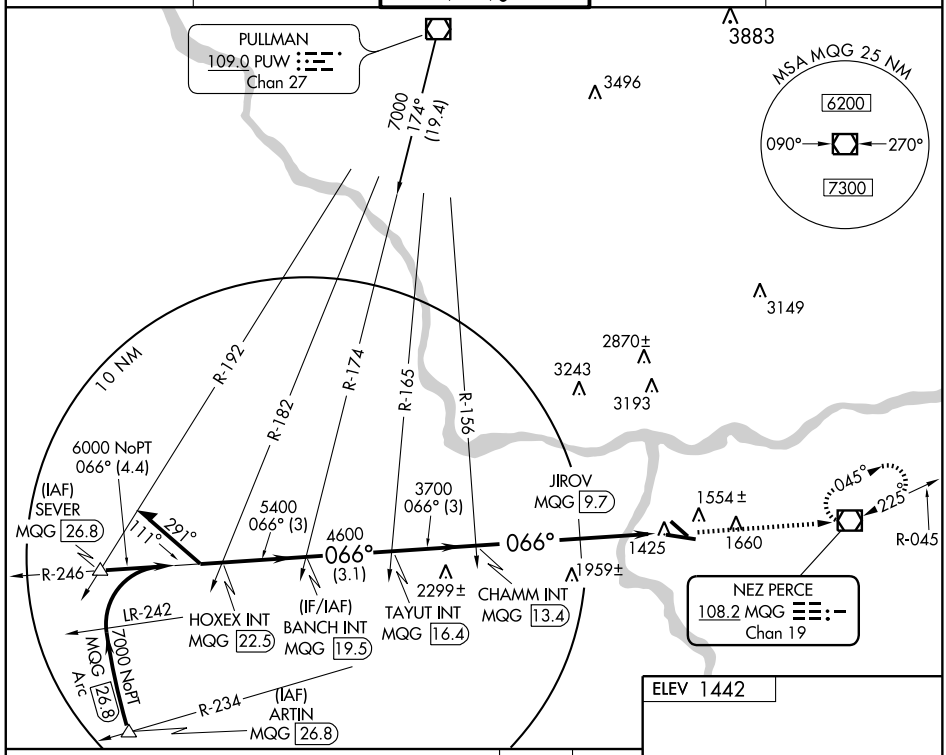
VOR/DME MQG	APP CRS	Rwy Idg	6511
108.2	066°	TDZE	1440
Chan 19		Apt Elev	1442

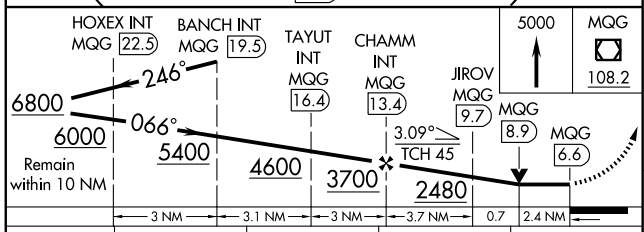
VOR RWY 8

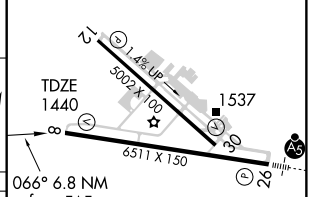
LEWISTON-NEZ PERCE COUNTY (LWS)

MISSED APPROACH: Climb to 5000 direct MQG VOR/DME and hold, continue climb-in-hold to 5000.

ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) L 318.8	121.9	122.95







CATEGORY	A	B	C	D
S-8	2480-1¼ 1040 (1100-1¼)	2480-1½ 1040 (1100-1½)	2480-3 1040 (1100-3)	
CIRCLING	2480-1¼ 1038 (1100-1¼)	2480-1½ 1038 (1100-1½)	2480-3 1038 (1100-3)	
JIROV FIX MINIMUMS				
S-8	2220-1 780 (800-1)	2220-1¼ 780 (800-1¼)	2220-2¼ 780 (800-2¼)	2220-2½ 780 (800-2½)
CIRCLING	2220-1 778 (800-1)	2220-1¼ 778 (800-1¼)	2220-2¼ 778 (800-2¼)	2220-2½ 778 (800-2½)

REIL Rwys 8 and 12 L
HIRL Rwy 8-26
MIRL Rwy 12-30

FAF to MAP 6.8 NM					
Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME MQG	APP CRS	Rwy Idg	6511
108.2	242°	TDZE	1442
Chan 19		Apt Elev	1442

VOR RWY 26

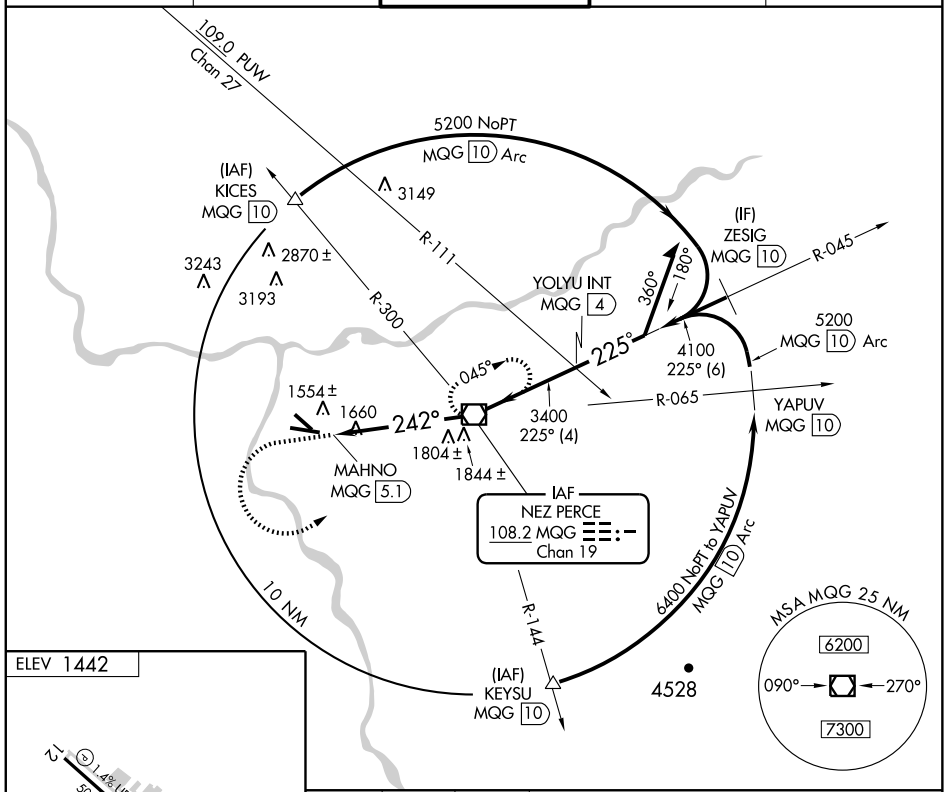
LEWISTON-NEZ PERCE COUNTY (LWS)

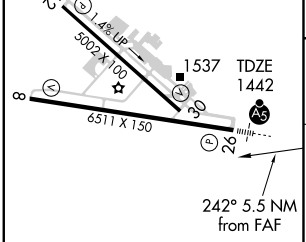
T Inoperative table does not apply to S-26 Cats C and D.
A When local altimeter setting not received, procedure NA.

MALSR

MISSED APPROACH: Climb to 2600 then climbing left turn to 5000 direct MQG VOR/DME and hold, continue climb-in-hold to 5000.

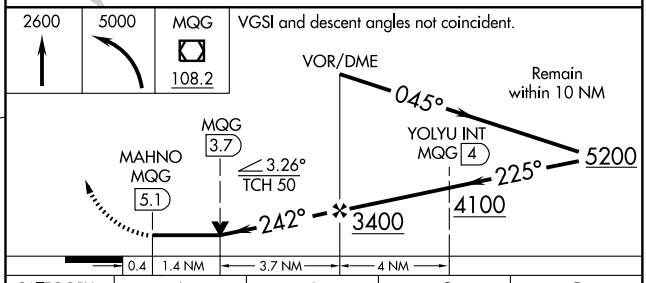
ASOS	SEATTLE CENTER	LEWISTON TOWER*	GND CON	UNICOM
135.575	123.95 282.3	119.4 (CTAF) 318.8	121.9	122.95





REIL Rwys 8 and 12(L)
HIRL Rwy 8-26
MIRL Rwy 12-30

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

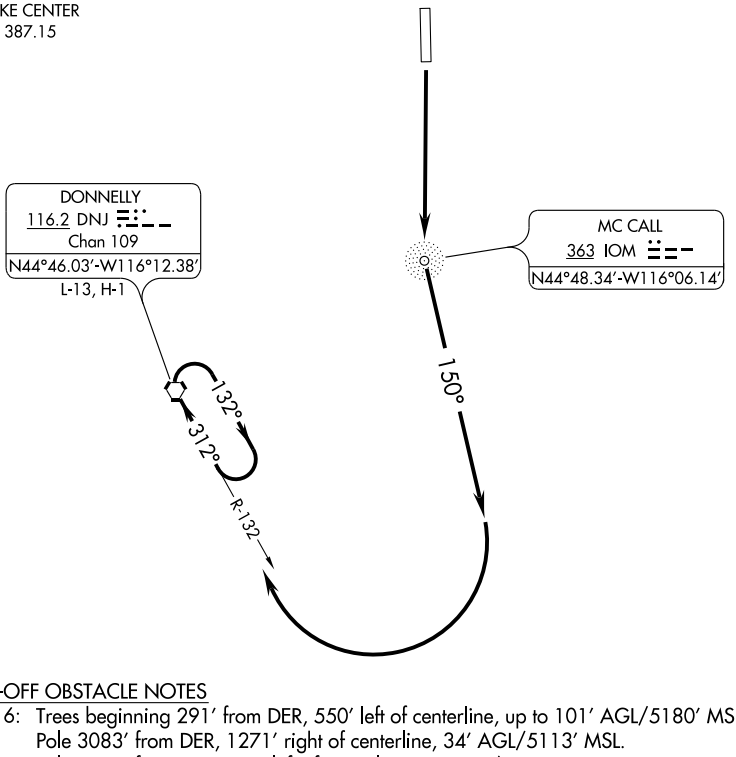


CATEGORY	A	B	C	D
S-26	2060-½ 618 (700-½)		2060-1¾ 618 (700-1¾)	2060-2 618 (700-2)
CIRCLING	2060-1 618 (700-1)		2060-1¾ 618 (700-1¾)	2160-2¼ 718 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

MC CALL ONE DEPARTURE (OBSTACLE)

ASOS 119.925
BOISE RADIO
122.35
SALT LAKE CENTER
128.05 387.15



TAKE-OFF OBSTACLE NOTES

Rwy 16: Trees beginning 291' from DER, 550' left of centerline, up to 101' AGL/5180' MSL.
Pole 3083' from DER, 1271' right of centerline, 34' AGL/5113' MSL.
Pole 4218' from DER, 521' left of centerline, 29' AGL/5128' MSL.
Shrub 63' from DER, 289' left of centerline, 7' AGL/5013' MSL.
Bldg 1066' from DER, 524' right of centerline, 36' AGL/5035' MSL.
Terrain beginning 1832' from DER, 445' left of centerline, up to 5079' MSL.
Terrain beginning 1236' from DER, 159' right of centerline, up to 5097' MSL.

TAKE-OFF MINIMUMS

Rwy 16: 200-1 or standard with minimum climb of 362' per NM to 5300.
Rwy 34: NA - Obstacles.

NOTE: ADF Required

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 9600 direct IOM NDB and via IOM NDB 150° bearing then climbing right turn to 10400 direct DNJ VORTAC, continue climb-in-hold to 10400 before proceeding on course.

NDB IOM 363	APP CRS 343°	Rwy Idg 6108 TDZE 5008 Apt Elev 5020

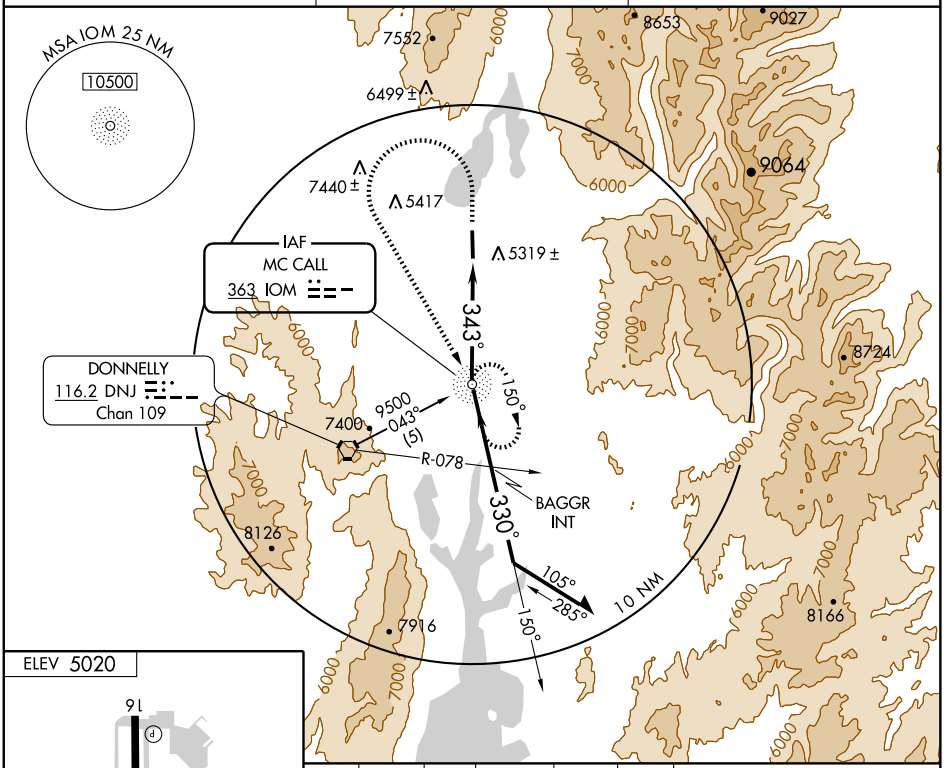
NDB RWY 34

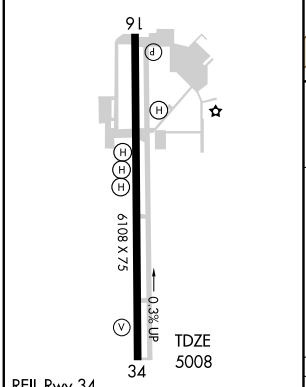
MC CALL MUNI (MYL)

T ANA — If local altimeter not received, procedure NA.

MISSED APPROACH: Climb to 6300, then climbing left turn via IOM NDB 313° bearing to IOM NDB, continue climb via IOM NDB 133° bearing to 9500, then turn right direct IOM NDB and hold.

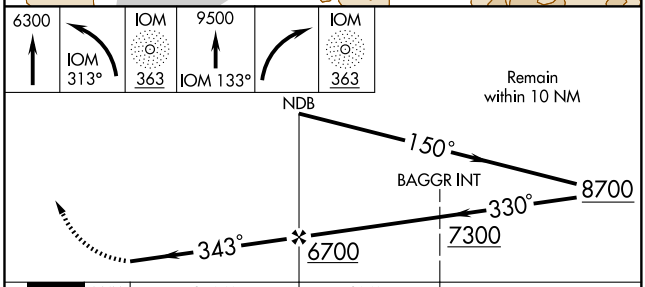
ASOS	SALT LAKE CENTER	UNICOM
119.925	128.05 387.15	122.8 (CTAF)





REIL Rwy 34
MIRL Rwy 16-34

FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10



CATEGORY	A	B	C	D
S-34	5800-1¼ 792 (800-1¼)		5800-2¼ 792 (800-2¼)	5800-2½ 792 (800-2½)
CIRCLING	5800-1¼ 780 (800-1¼)		5840-2½ 820 (900-2½)	6000-2 980 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6108
342°	TDZE	5012
	Apt Elev	5024

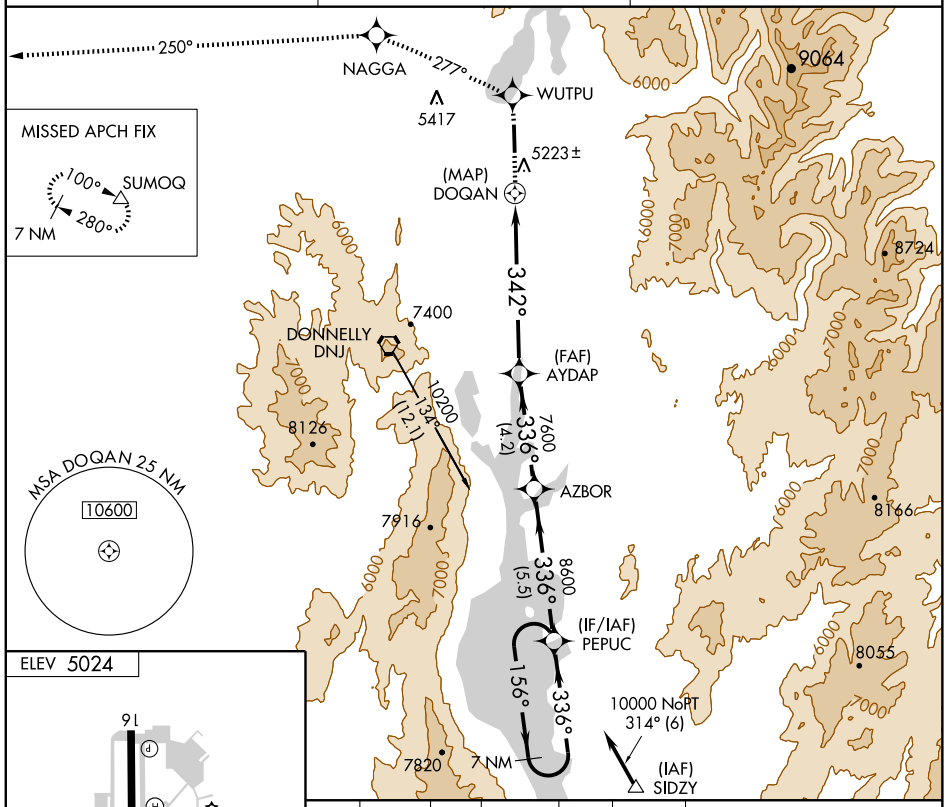
RNAV (GPS) RWY 34

MC CALL MUNI (MYL)

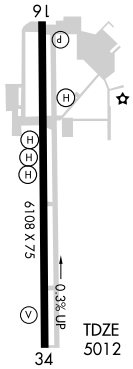
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

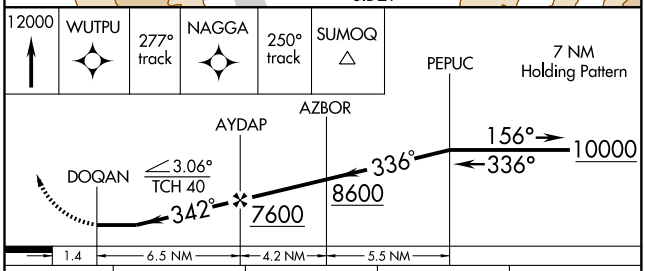
MISSED APPROACH: Climb to 12000 direct WUTPU and via 277° track to NAGGA and via 250° track to SUMOQ and hold, continue climb-in-hold to 12000.

ASOS	SALT LAKE CENTER	UNICOM
119.925	128.05 387.15	122.8 (CTAF)



ELEV 5024

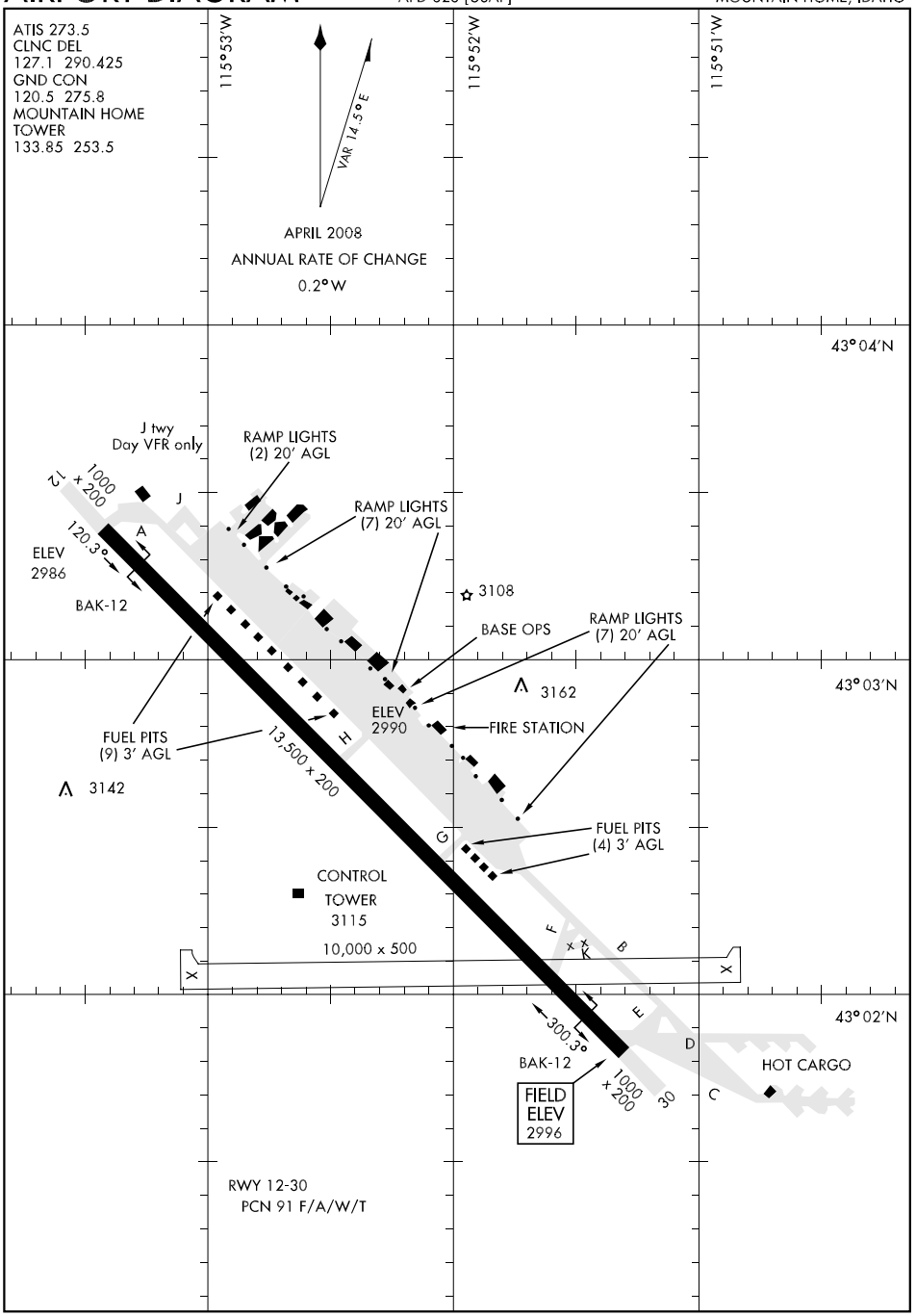




CATEGORY	A	B	C	D
LNAV MDA	5620-1¾ 608 (600-1¾)			5620-2 608 (600-2)
CIRCLING	5660-1¾ 636 (700-1¾)		5840-2½ 816 (900-2½)	6000-3 976 (1000-3)

REIL Rwy 34
MIRL Rwy 16-34

NW-1, 14 JAN 2010 to 11 FEB 2010



NW-1, 14 JAN 2010 to 11 FEB 2010

HI-ILS RWY 12

LOC I-MUO	APCH CRS	Rwy ldg 13,500 TDZE 2986 Arpt Elev 2996
110.3	117°	

JAL-323 [USAF]

MOUNTAIN HOME AFB (KMUO)

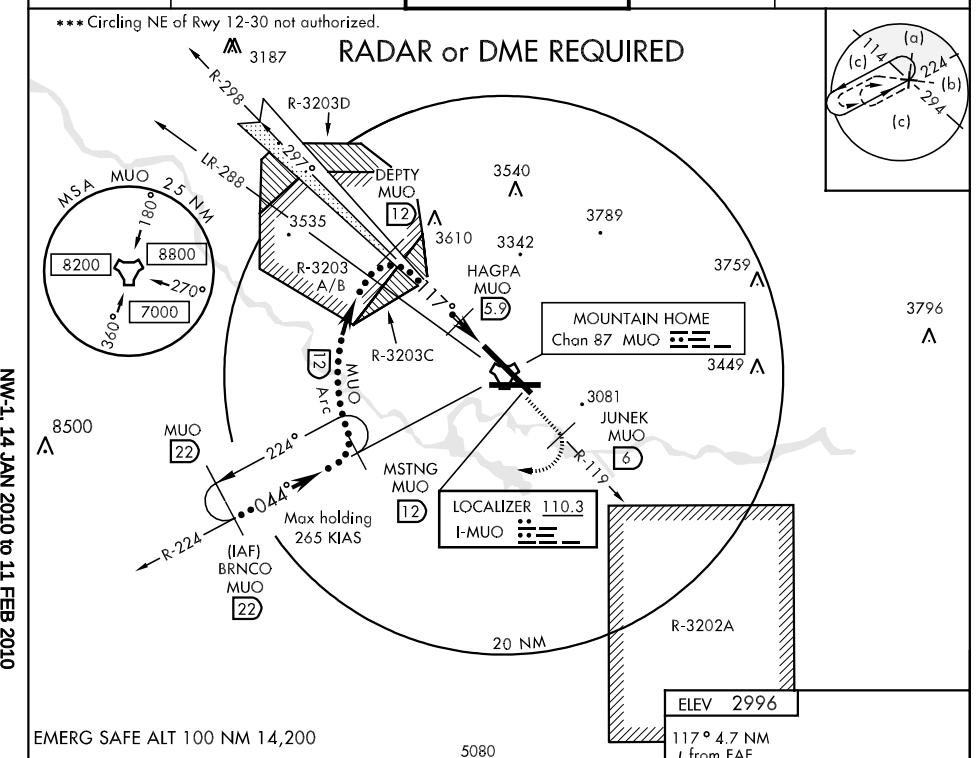
▼ * When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

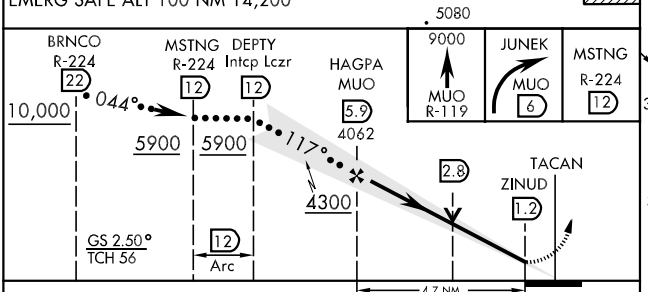
MISSED APPROACH: Climb to 9000 via MUO R-119 to JUNEK INT/6 DME, turn right direct MSTNG and hold.

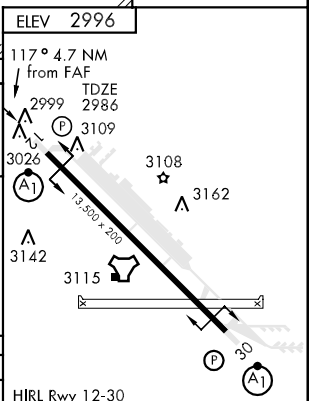
ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

*** Circling NE of Rwy 12-30 not authorized.



EMERG SAFE ALT 100 NM 14,200





CATEGORY	C	D	E
S-ILS 12 *	3186/24	200 (200-½)	
S-LOC 12 **	3480/40 494 (500-¾)	3480/50 494 (500-1)	3480/60 494 (500-1¼)
CIRCLING ***	3520-1½ 524 (600-1½)	3560-2 564 (600-2)	

FAF to MAP 4.7 NM					
Knots	120	140	160	180	200
Min:Sec	2:21	2:01	1:46	1:34	1:25

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-ILS RWY 30

LOC I-BRN	APCH CRS	Rwy ldg 13,500 TDZE 2996 Arpt Elev 2996	JAL-323 [USAF]	MOUNTAIN HOME AFB (KMUO)
111.7	297°			

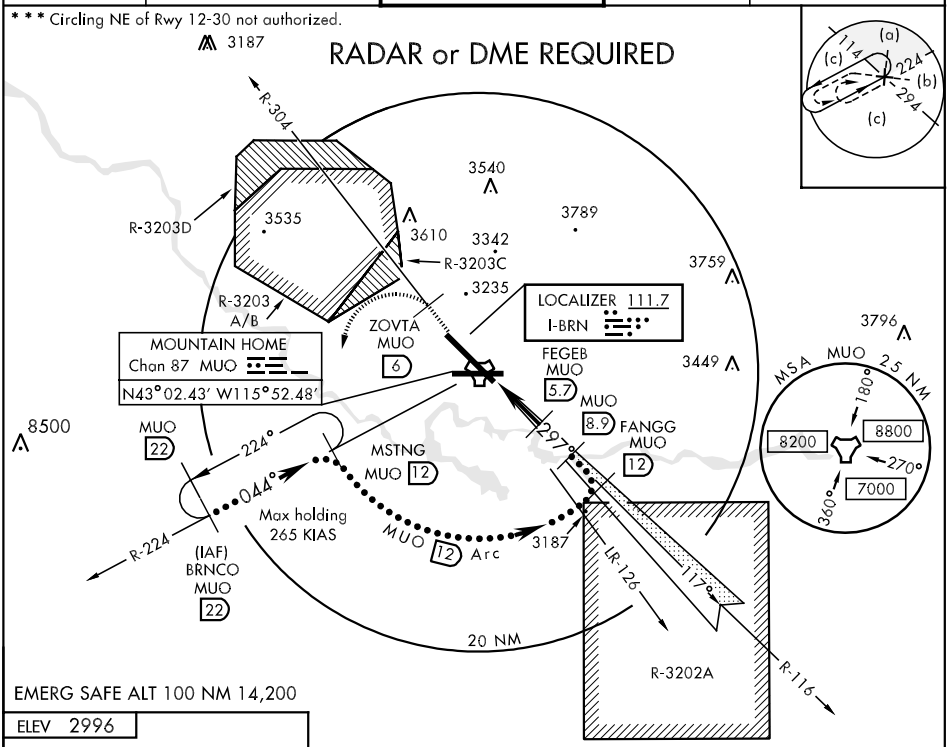
* When ALS inop, increase CAT CDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 9000 via MUO R-304 to ZOVTA INT/6 DME, turn left direct MSTNG and hold.

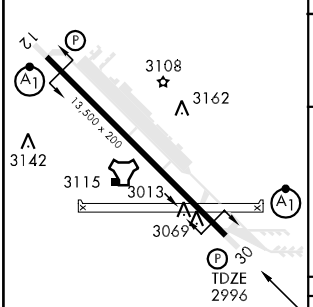
ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

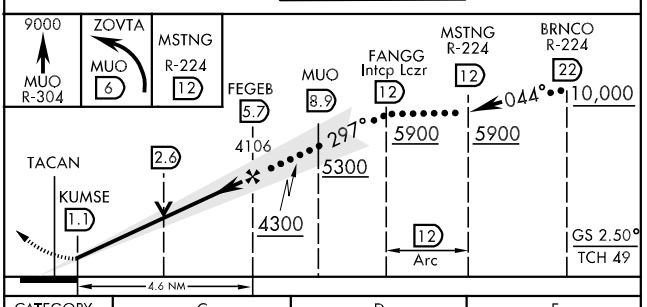
* * * Circling NE of Rwy 12-30 not authorized.



EMERG SAFE ALT 100 NM 14,200

ELEV 2996





CATEGORY	C	D	E
S-ILS 30 *	3196/24	200 (200-½)	
S-LOC 30 **	3460/40 464 (500-¾)	3460/50 464 (500-1)	3460/60 464 (500-1¼)
CIRCLING ***	3520-1½ 524 (600-1½)	3560-2	564 (600-2)

FAF to MAP 4.6 NM					
Knots	120	140	160	180	200
Min:Sec	2:19	1:59	1:44	1:33	1:24

HI-TACAN RWY 12

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
MUO Chan 87	124°	13,500	2986	2996

JAL-323 [USAF]

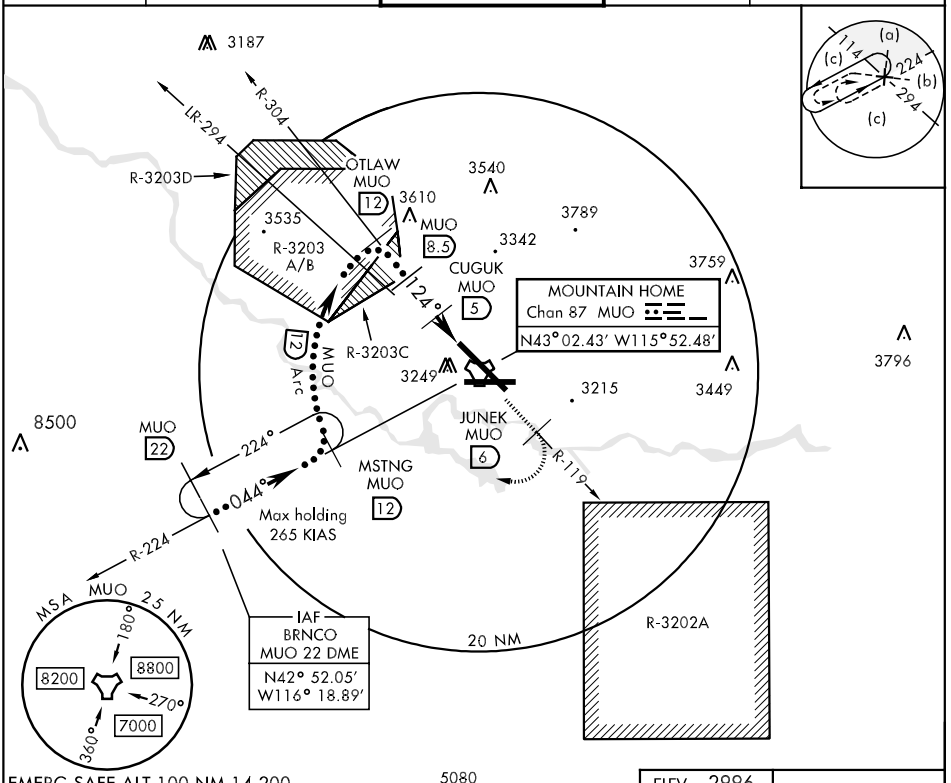
MOUNTAIN HOME AFB (KMUO)

* When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling NE of Rwy 12-30 not authorized.

ALSF-1

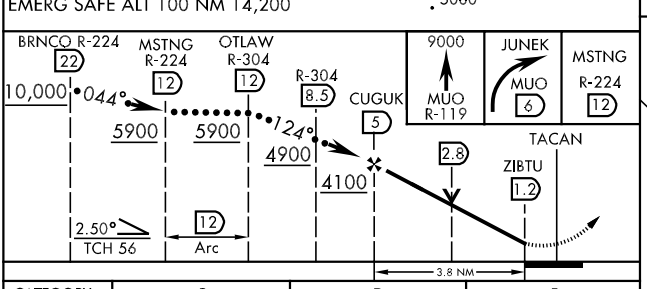
MISSED APPROACH: Climb to 9000 via MUO R-119 to JUNEK INT/6 DME, turn right direct MSTNG and hold.

ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

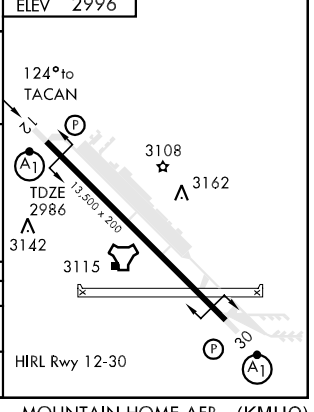


EMERG SAFE ALT 100 NM 14,200

5080



CATEGORY	C	D	E
S-12 *	3480/40 494 (500-¾)	3480/50 494 (500-1)	3480/60 494 (500-1¼)
CIRCLING **	3520-1½ 524 (600-1½)	3560-2 564 (600-2)	



HI-TACAN RWY 30

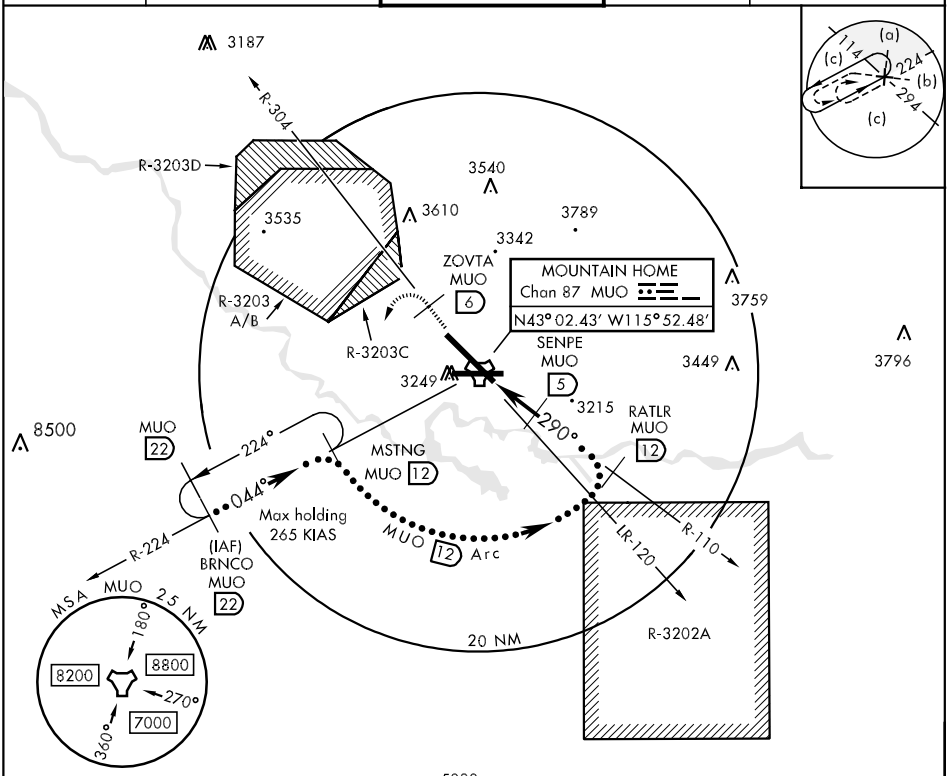
TACAN MUO Chan 87	APCH CRS 290°	Rwy ldg 13,500 TDZE 2996 Arpt Elev 2996	JAL-323 [USAF]	MOUNTAIN HOME AFB (KMUO)

* When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling NE of Rwy 12-30 not authorized.

ALSF-1

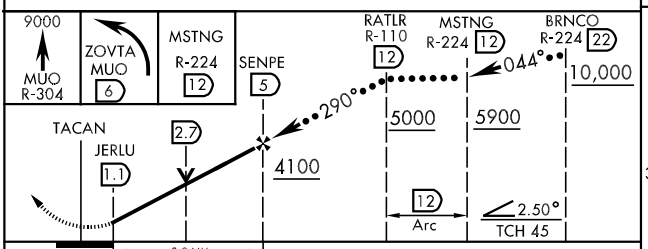
MISSED APPROACH: Climb to 9000 via MUO R-304 to ZOVTA INT/6 DME, turn left direct MSTNG and hold.

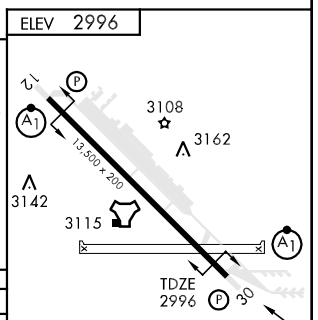
ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425



EMERG SAFE ALT 100 NM 14,200

5080





CATEGORY	C	D	E
S-30*	3480/40 484 (500-¾)	3480/50 484 (500-1)	3480/60 484 (500-1¼)
CIRCLING**	3520-1½ 524 (600-1½)	3560-2 564 (600-2)	

ILS RWY 12

LOC I-MUO	APCH CRS	Rwy ldg 13,500 TDZE 2986 Arpt Elev 2996
110.3	117°	

AL-323 [USAF]

MOUNTAIN HOME AFB (KMUO)

▼ * When ALS inop, increase RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

MISSED APPROACH: Climb to 9000 via MUO R-119 to JUNEK INT/6 DME, turn right direct MSTNG and hold.

ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

*** Circling NE of Rwy 12-30 not authorized.

3610 3789 3535 3342

R-298 297° DEPTY MUO 12

R-3203 A/B

LR-288

R-3203C

HAGPA MUO 5.9

117°

MUO 12 Arc

MOUNTAIN HOME Chan 87 MUO

LOCALIZER 110.3 I-MUO

3081 JUNEK MUO 6

R-119

MUO 22

224°

044°

R-224

Max holding 265 KIAS

IAF MSTNG MUO 12 DME N42°56.78′ W116°06.90′

10 NM

MSA MUO 25 NM 180° 8800 270° 7000 360° 8200

R-3202A

ELEV 2996

117° 4.7 NM from FAF

TDZE 2986

2999 3109 3026 3108 3162 3142 3115

13,500 x 200

30

HIRL Rwy 12-30

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 14,200

MSTNG R-224 12

DEPTY Intcp Lczr 12

10,000 5900 117° HAGPA 5.9 4062 4300 2.8 TACAN ZINUD 1.2

Arc 12

GS 2.50° TCH 56

4.7 NM

9000 MUO R-119

JUNEK MUO 6

MSTNG MUO R-224/12

CATEGORY	A	B	C	D	E
S-ILS 12 *	3186/24 200 (200-½)				
S-LOC 12 **	3460/24 474 (500-½)		3460/40 474 (500-¾)	3460/50 474 (500-1)	3460/60 474 (500-1¼)
CIRCLING ***	3520-1 524 (600-1)		3520-1½ 524 (600-1½)	3560-2 564 (600-2)	

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

ILS RWY 30

LOC I-BRN	APCH CRS	Rwy ldg 13,500 / TDZE 2996 / Arpt Elev 2996
111.7	297°	

AL-323 [USAF]

MOUNTAIN HOME AFB (KMUO)

▼ * When ALS inop, increase CAT ABCDE RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

MISSED APPROACH: Climb to 9000 via MUO R-304 to ZOVTA/6 DME, turn left direct MSTNG and hold.

ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

• 3535
*** Circling NE of Rwy 12-30 not authorized.

3342
3789
3235

R-3203 A/B
R-304
ZOVTA MUO 6
R-3203C

MSA MUO 25 NM
180°
8800
8200
270°
7000
360°

MOUNTAIN HOME Chan 87 MUO

LOCALIZER 111.7 I-BRN

Max holding 265 KIAS

FEGEB MUO 5.7

MUO 22
224°
044°
(IAF) MSTNG MUO 12
R-224

297°
LR-126
117°
FANGG MUO 12
R-116

10 NM
MUO 12 Arc
3187
R-3202A

ELEV 2996

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 14,200

9000 R-304
6 ZOVTA
MSTNG MUO R-224/12

FEGEB 5.7 4106
FANGG Intcp Lczr 12
MSTNG R-224 12
10,000
297°
5900
TACAN KUMSE 1.1
2.6
4300
Arc 12
GS 2.50° TCH 49
4.6 NM

12
13,500 x 200
3108
3162
3142
3115
3013
3069
TDZE 2996
30
HIRL Rwy 12-30
297° 4.6 NM from FAF

CATEGORY	A	B	C	D	E
S-ILS 30 *	3196/24 200 (200-½)				
S-LOC 30 **	3460/24 464 (500-½)		3460/40 464 (500-¾)	3460/50 464 (500-1)	3460/60 464 (500-1¼)
CIRCLING ***	3520-1 524 (600-1)		3520-1½ 524 (600-1½)	3560-2 564 (600-2)	

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:39	3:06	2:19	1:52	1:33

TACAN RWY 12

TACAN MUO	APCH CRS	Rwy ldg	TDZE	Arpt Elev
Chan 87	124°	13,500	2986	2996

AL-323 [USAF]

MOUNTAIN HOME AFB (KMUO)

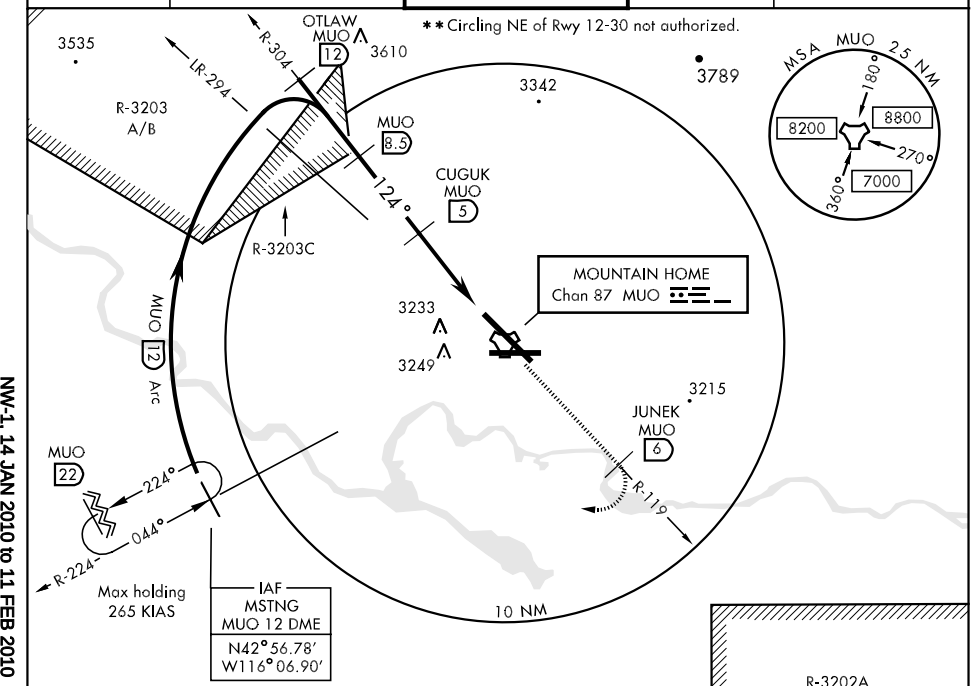
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

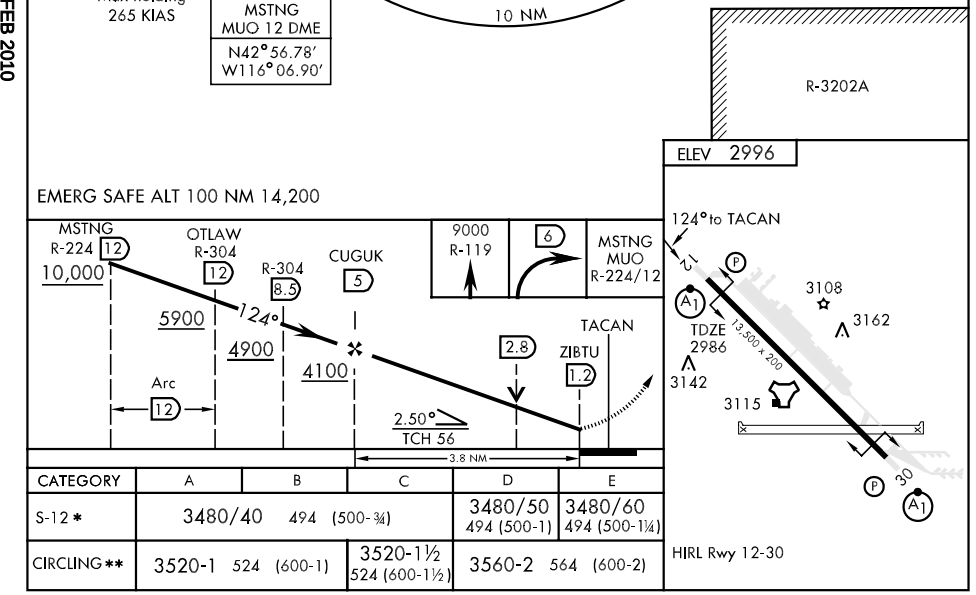
ALSF-1

MISSED APPROACH: Climb to 9000 via MUO R-119 to JUNEK INT/6 DME, turn right direct MSTNG and hold.

ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

** Circling NE of Rwy 12-30 not authorized.





CATEGORY	A	B	C	D	E
S-12 *	3480/40 494 (500-¾)			3480/50 494 (500-1)	3480/60 494 (500-1¼)
CIRCLING **	3520-1 524 (600-1)		3520-1½ 524 (600-1½)	3560-2 564 (600-2)	

TACAN RWY 30

TACAN MUO	APCH CRS	Rwy ldg 13,500 TDZE 2996 Arpt Elev 2996	AL-323 [USAF]	MOUNTAIN HOME AFB (KMUO)
Chan 87	290°			

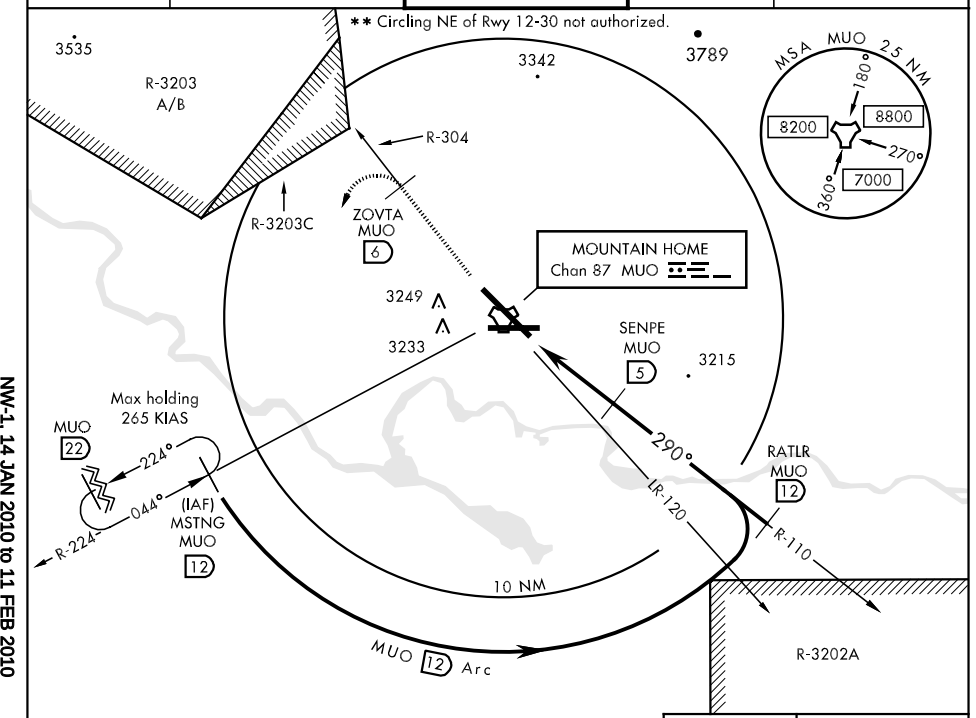
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

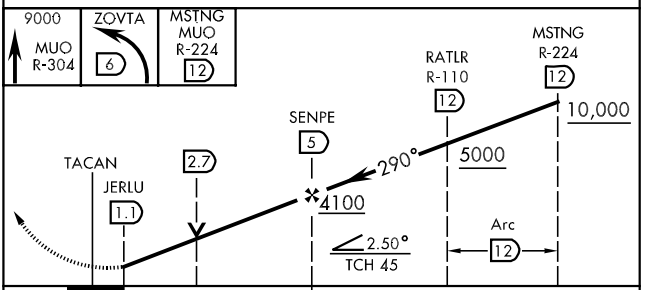
ALSF-1 (A1)

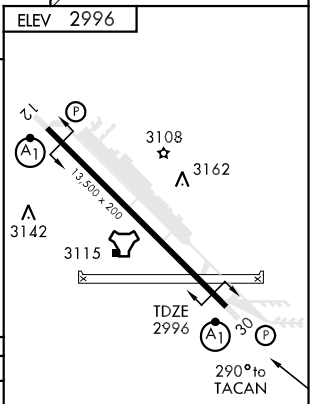
MISSED APPROACH: Climb to 9000 via MUO R-304 to ZOVTA INT/6 DME, turn left direct MSTNG and hold.

ATIS	MOUNTAIN HOME APP CON	MOUNTAIN HOME TOWER	GND CON	CLNC DEL
273.5	124.8 259.1	133.85 253.5	120.5 275.8	127.1 290.425

** Circling NE of Rwy 12-30 not authorized.







CATEGORY	A	B	C	D	E
S-30 *	3480/24 484	(500-½)	3480/40 484 (500-¾)	3480/50 484 (500-1)	3480/60 484 (500-1¼)
CIRCLING**	3520-1 524	(600-1)	3520-1½ 524 (600-1½)	3560-2 564	(600-2)

NDB STI 333	APP CRS 271°	Rwy Idg 5000 TDZE 3165 Apt Elev 3167

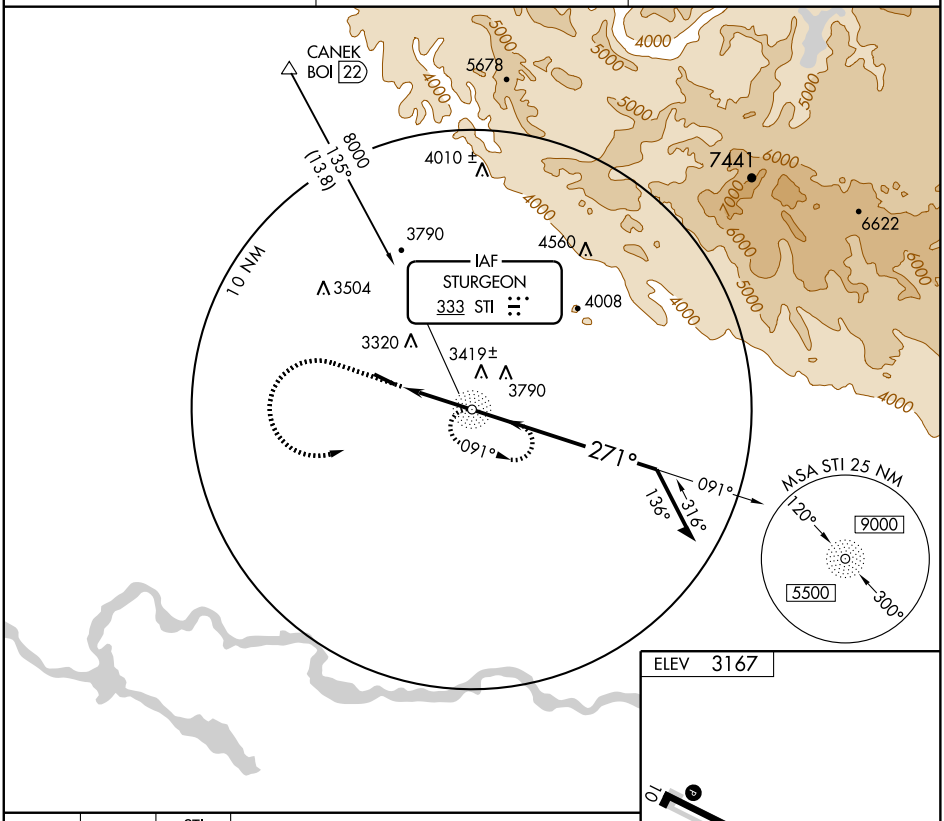
NDB RWY 28

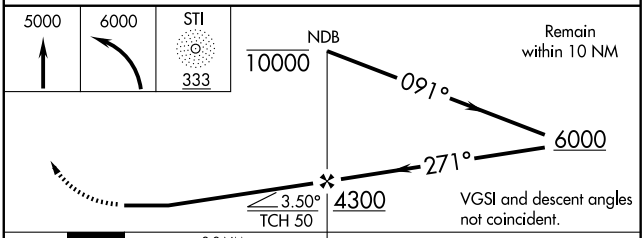
MOUNTAIN HOME MUNI (U76)

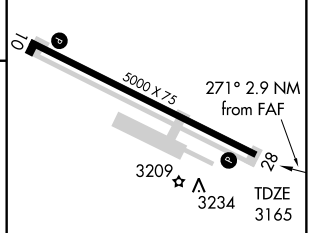
▼ NA — Circling to Rwy 10 NA at night. Visibility reduction by helicopters NA. Use Mountain Home AFB altimeter setting; when not received, procedure NA.

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct STI NDB and hold.

AWOS-3	MOUNTAIN HOME APP CON ★	UNICOM
122.8	124.8 259.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-28	3720-1	555 (600-1)	3720-1½ 555 (600-1½)	3720-1¾ 555 (600-1¾)
CIRCLING	3720-1	553 (600-1)	3820-1¾ 653 (700-1¾)	3840-2¼ 673 (700-2¼)

REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

FAF to MAP 2.9 NM

Knots	60	90	120	150	180
Min:Sec	2:54	1:56	1:27	1:10	0:58

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 28

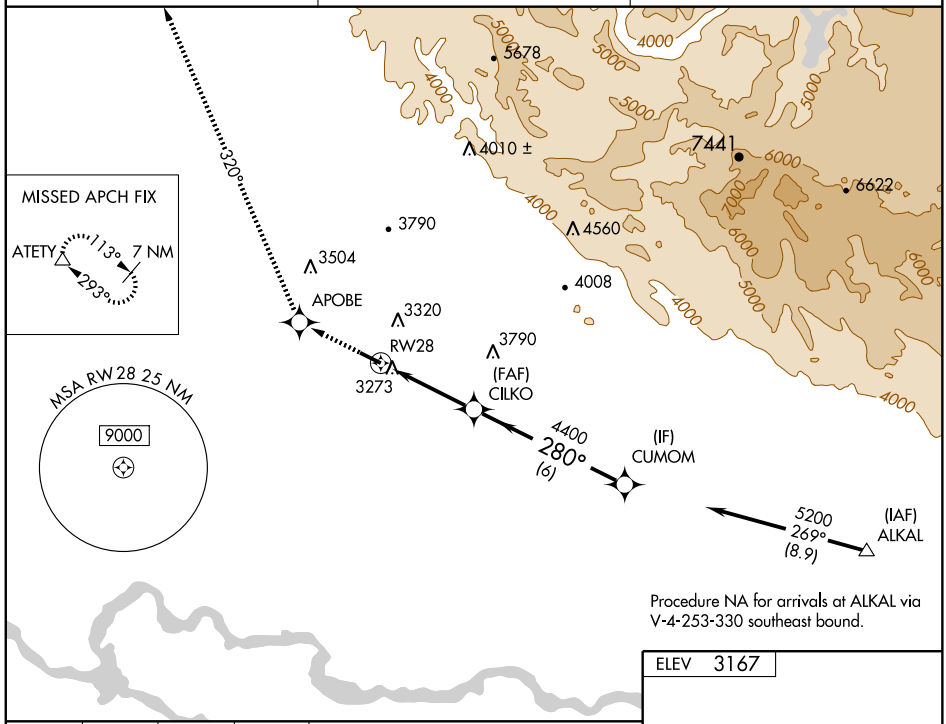
MOUNTAIN HOME MUNI (U76)

WAAS	APP CRS		
CH **42815**	**280°**	Rwy Idg	**5000**
W28A		TDZE	**3165**
		Apt Elev	**3167**

Circling to Rwy 10 NA at night. Baro-VNAV NA. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Mountain Home AFB altimeter setting, when not received procedure NA.

MISSED APPROACH: Climb to 7900 direct APOBE and via track 320° to ATETY and hold, continue climb-in-hold to 7900.

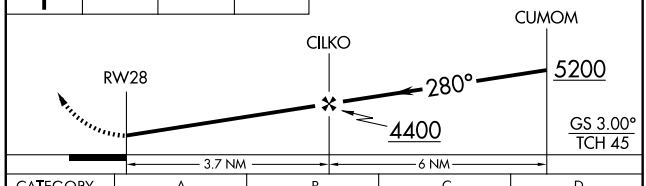
AWOS-3	MOUNTAIN HOME APP CON ★	UNICOM
122.8	**124.8 259.1**	**122.8** (CTAF) L

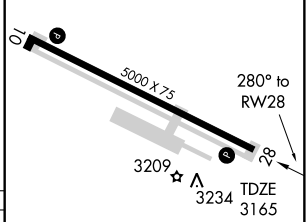


7900	APOBE	trk 320°	ATETY

VGSI and RNAV glidepath not coincident.

Procedure Turn NA





CATEGORY	A	B	C	D
LPV DA	3458-1 293 (300-1)			
LNAV/VNAV DA	3566-1½ 401 (400-1½)			
LNAV MDA	3580-1 415 (500-1)		3580-1¼ 415 (500-1¼)	
CIRCLING	3700-1 533 (600-1)	3720-1 553 (600-1)	3820-1¾ 653 (700-1¾)	3840-2¼ 673 (700-2¼)

REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
290°	TDZE	N/A
	Apt Elev	2537

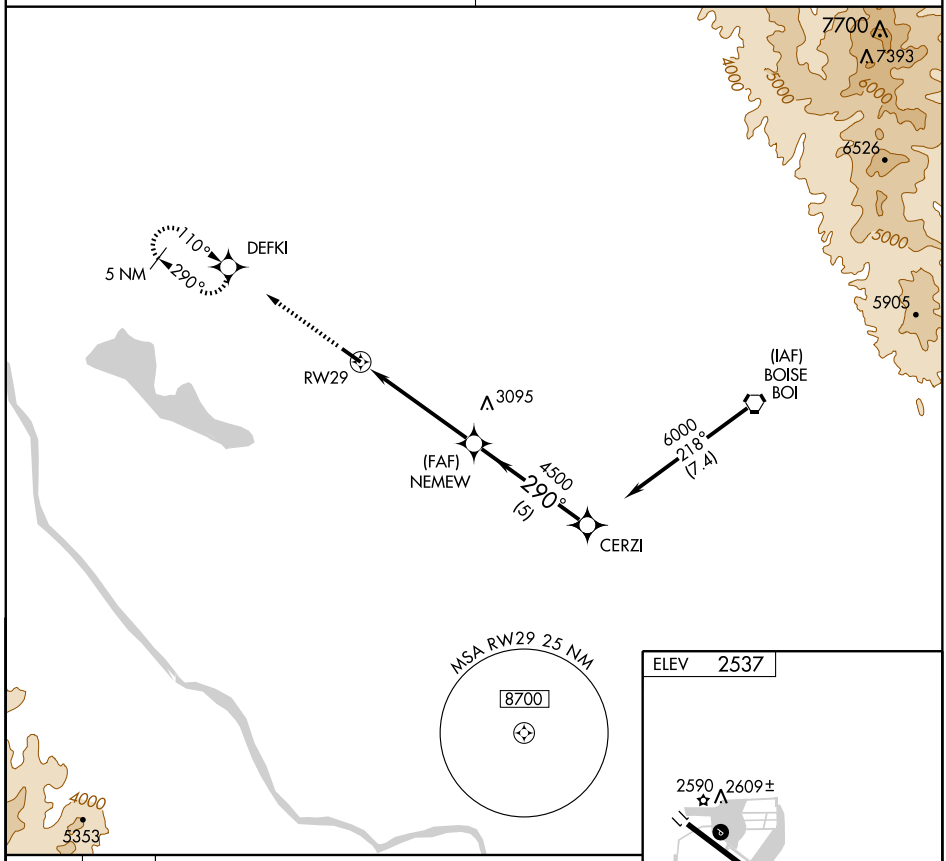
GPS-B
NAMPA MUNI (S67)

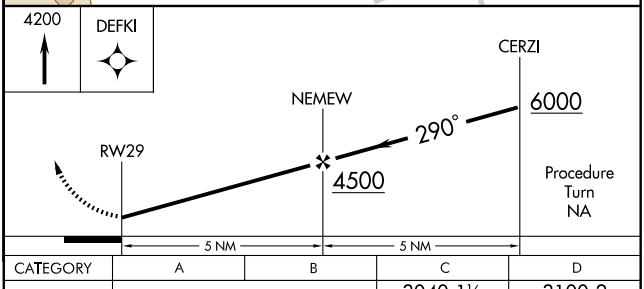
NA

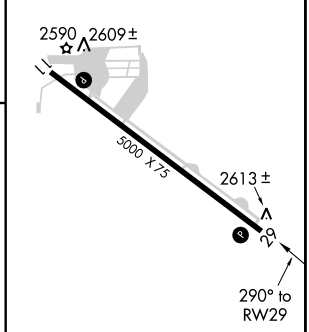
Use Caldwell altimeter setting.

MISSED APPROACH: Climb to 4200 direct DEFKI WP and hold.

BOISE APP CON	UNICOM
119.6 269.4	122.7 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	3040-1	503 (600-1)	3040-1½ 503 (600-1½)	3100-2 563 (600-2)

MIRL Rwy 11-29

NW-1, 14 JAN 2010 to 11 FEB 2010

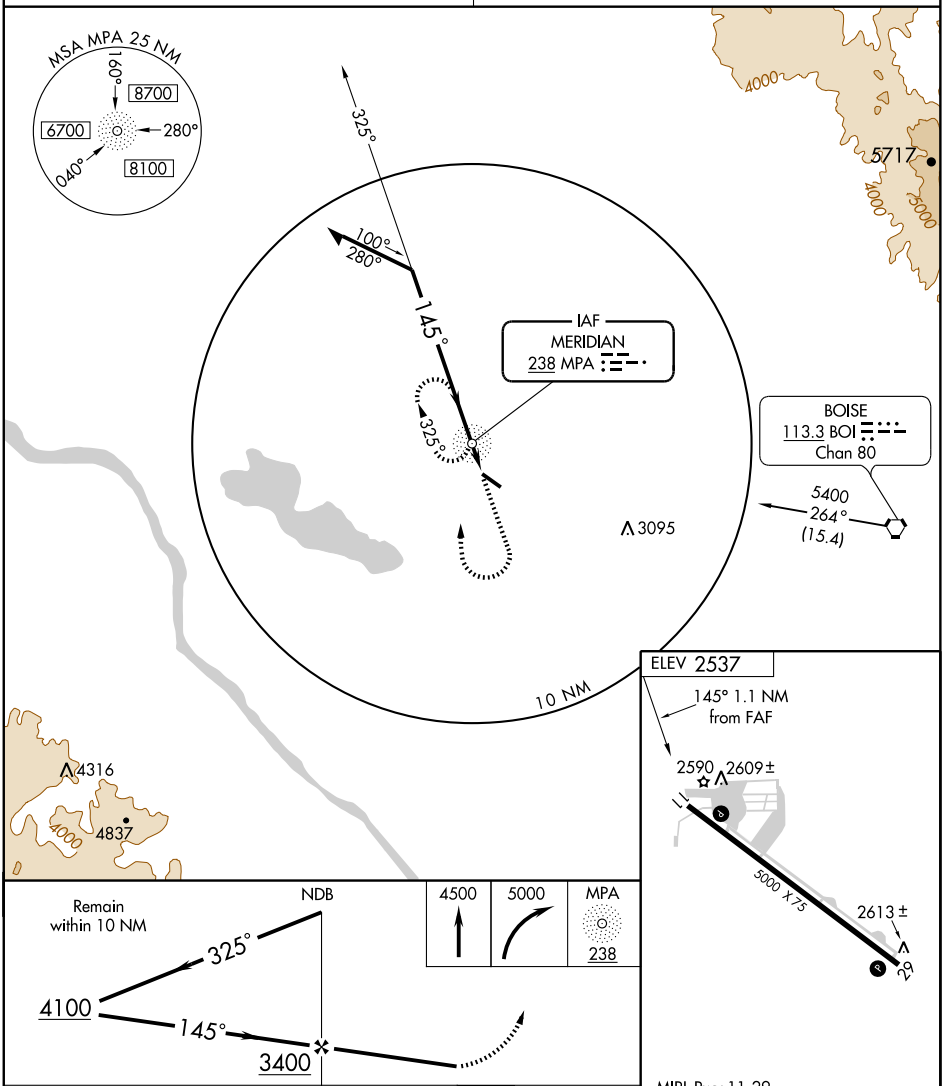
NDB MPA	APP CRS	Rwy Idg	N/A
238	145°	TDZE	N/A
		Apt Elev	2537

NDB-A
NAMPA MUNI (S67)

Use Caldwell altimeter setting; if not received use Boise altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climb to 4500 then climbing righ turn to 5000 direct MPA NDB and hold.

BOISE APP CON	UNICOM
119.6 269.4	122.7 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	3040-1	503 (600-1)	3040-1½ 503 (600-1½)	3100-2 563 (600-2)

FAF to MAP 1.1 NM

Knots	60	90	120	150	180
Min:Sec	1:06	0:44	0:33	0:26	0:22

WAAS CH 78202 W11A	APP CRS 110°	Rwy Idg 5000 TDZE 2537 Apt Elev 2537

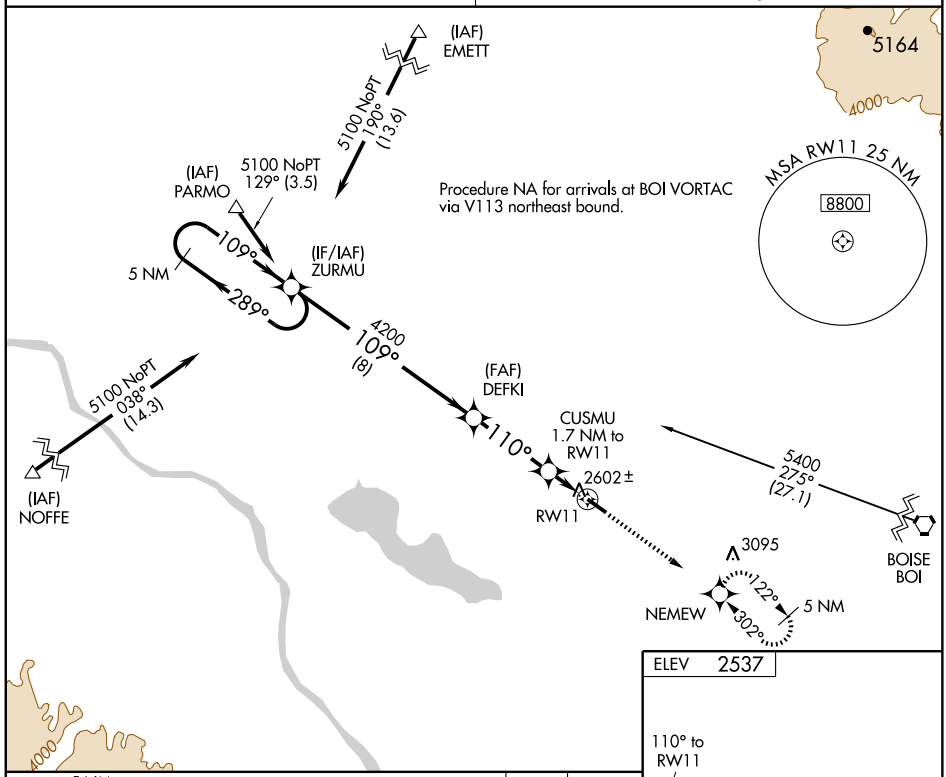
RNAV (GPS) RWY 11

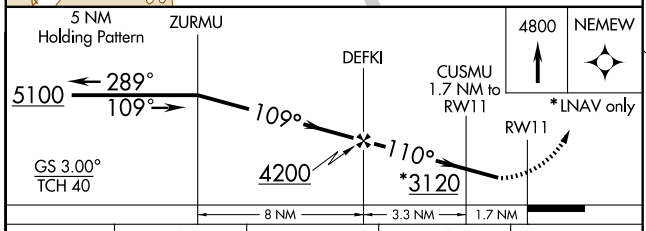
NAMPA MUNI (S67)

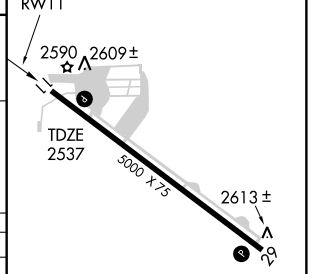
Baro-VNAV NA.
Use Caldwell Industrial altimeter setting; if not received, use Boise Air Terminal/Gowen Fld altimeter setting and increase all DAs/MDAs 60 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4800 direct NEMEW and hold, continue climb-in-hold to 4800.

BOISE APP CON	UNICOM
119.6 269.4	122.7 (CTAF) L







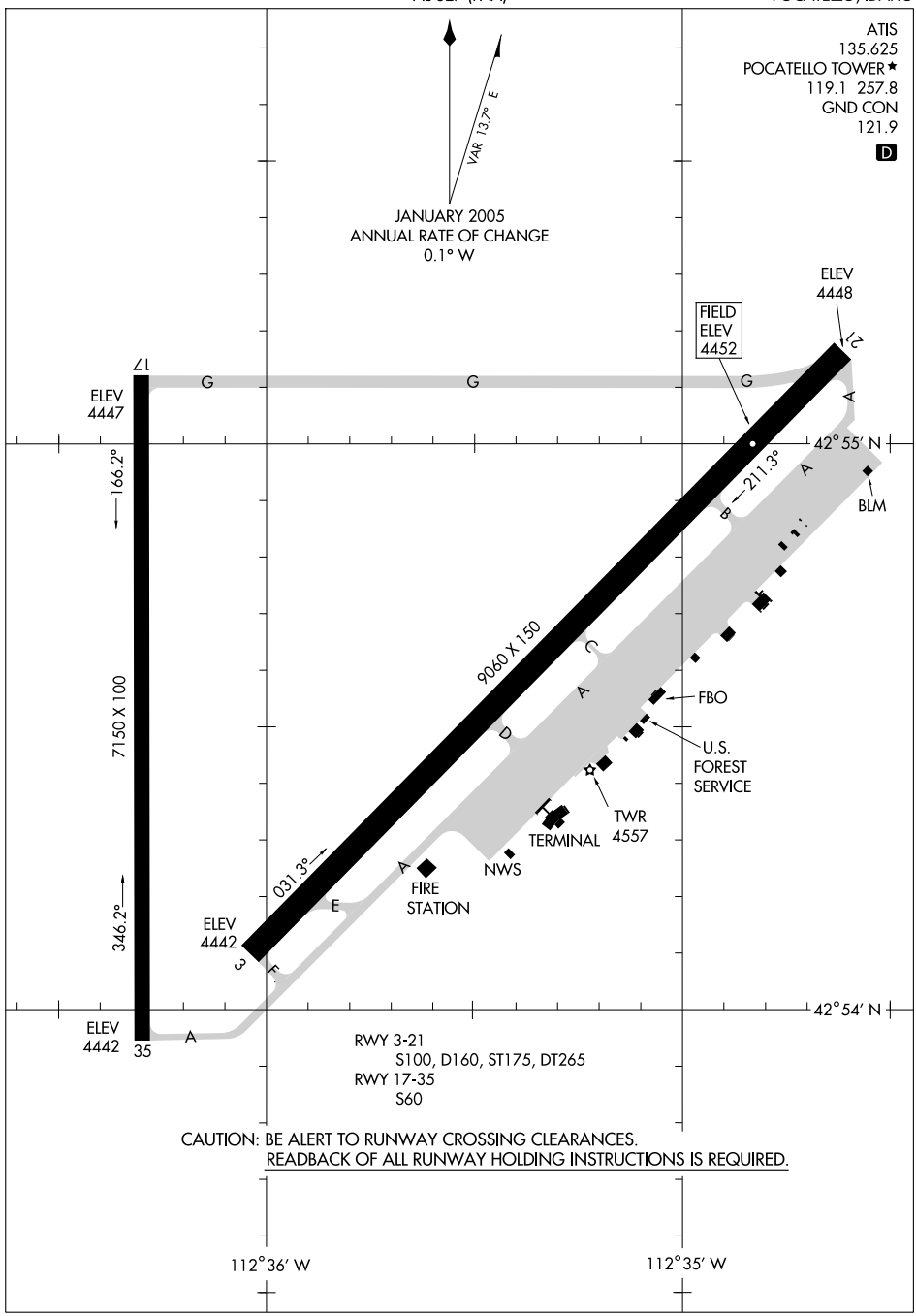
CATEGORY	A	B	C	D
LPV DA	2844-1 307 (400-1)			
LNAV/VNAV DA	2881-1¼ 344 (400-1¼)			
LNAV MDA	2900-1 363 (400-1)			2900-1¼ 363 (400-1¼)
CIRCLING	3040-1 503 (600-1)		3040-1½ 503 (600-1½)	3100-2 563 (600-2)

MIRL Rwy 11-29

AIRPORT DIAGRAM

AL-327 (FAA)

POCATELLO RGNL (PIH)
POCATELLO, IDAHO



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-PIH	APP CRS	Rwy Idg	9060
110.3	211°	TDZE	4452
Chan 40		Apt Elev	4452

ILS or LOC RWY 21

POCATELLO RGNL (PIH)

T Circling NA southeast of Rwy 3-21.
A For inoperative MALSR, increase S-ILS-21 Cat E visibility to RVR 4000, and S-LOC-21 Cat E visibility to RVR 5000. ** Visibility CAT A/B/C/D, RVR 1800 authorized with the use of FD or AP or HUD to DA.

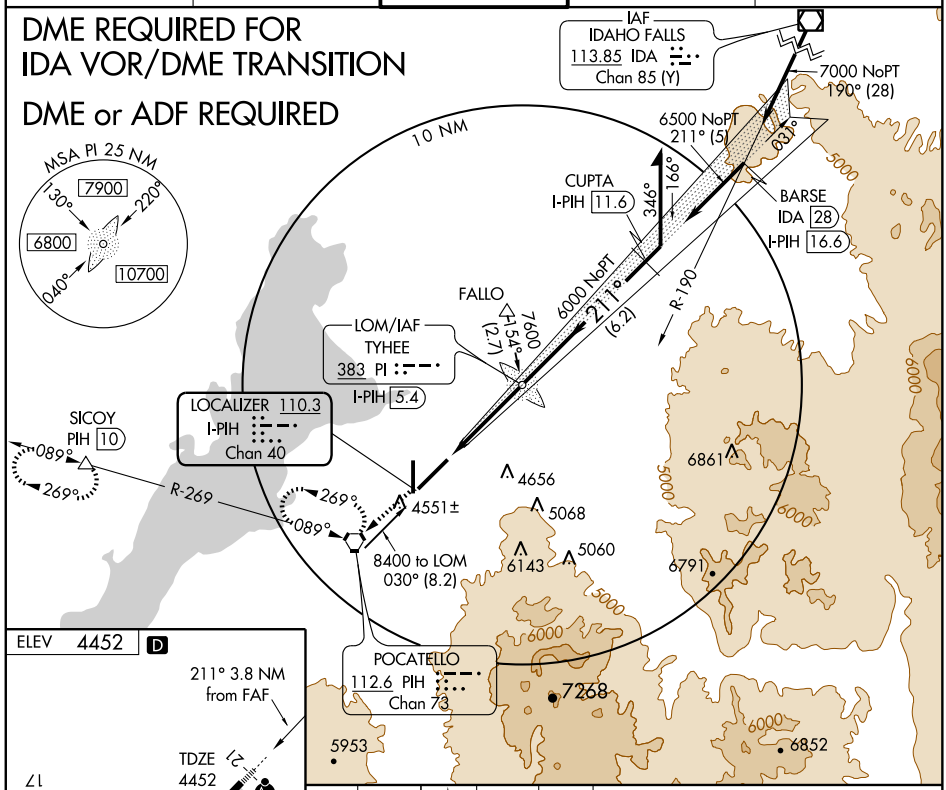
MALSR

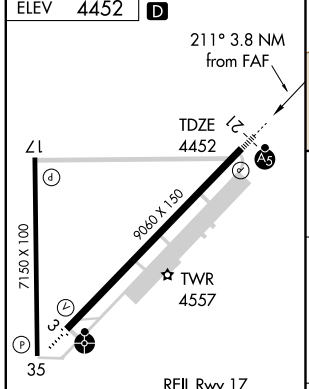
MISSED APPROACH: Climb to 7400 direct PIH VORTAC, continue climb via PIH VORTAC R-269, then right turn direct PIH VORTAC and hold (TACAN aircraft continue via PIH VORTAC R-269 to SICOY/ PIH 10 DME and hold W, right turns, 089° inbound).

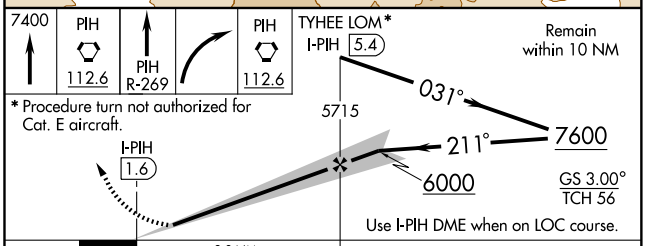
ATIS	SALT LAKE CENTER	POCATELLO TOWER★	GND CON	UNICOM
135.625	128.35 239.25	119.1 (CTAF) L 257.8	121.9	122.95

DME REQUIRED FOR IDA VOR/DME TRANSITION

DME or ADF REQUIRED







* Procedure turn not authorized for Cat. E aircraft.

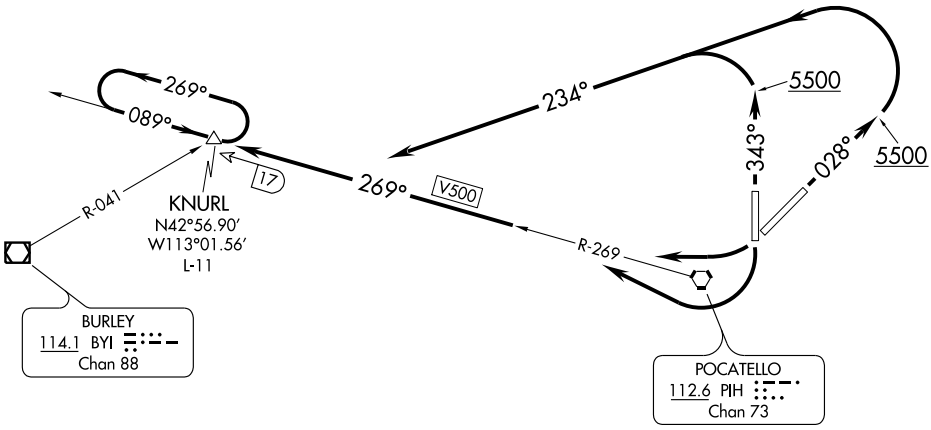
CATEGORY	A	B	C	D	E
S-ILS 21	** 4652/24 200 (200-½)				
S-LOC 21	4740/24 288 (300-½)			4740/40 288 (300-¾)	
CIRCLING	4820-1 368 (400-1)	4920-1 468 (500-1)	4920-1½ 468 (500-1½)	5020-2 568 (600-2)	

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

NW-1, 14 JAN 2010 to 11 FEB 2010

KNURL ONE DEPARTURE (OBSTACLE)

BOISE RADIO
122.6
POCATELLO TOWER ★
119.1 (CTAF) 257.8
SALT LAKE CENTER
128.35 239.25



TAKE-OFF MINIMUMS

Rwy 3, 21, 35: Standard.
Rwy 17, 400-2 or standard with minimum climb of 270' per NM to 4900.

TAKE-OFF OBSTACLE NOTES

Rwy 3, Trees beginning 3353' from DER, 735' left of centerline, up to 100' AGL/4549' MSL.
Rod on obstruction light 978' from DER, 759' right of centerline, 39' AGL/4486' MSL.
Rwy 17, Transmission tower 1.1 NM from DER, 2395' left of centerline, 252' AGL/4693' MSL.
Trees beginning 1.6 NM from DER, 2642' left of centerline, up to 100' AGL/4759' MSL.
Fence 112' from DER, 416' right of centerline, 12' AGL/4453' MSL.
Bush 30' from DER, 261' right of centerline, 3' AGL/4445' MSL.
Fence 208' from DER, 421' right of centerline, 13' AGL/4449' MSL.
Rwy 21, Antenna 453' from DER, 309' left of centerline, 20' AGL/4466' MSL.
Light on localizer, 543' from DER, 286' left of centerline, 20' AGL/4462' MSL.
Rwy 35, Electrical equipment 197' from DER, 248' left of centerline, 7' AGL/4454' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb heading 028° to 5500, then climbing left turn to 7500 via heading 234° and PIH R-269 to KNURL INT, thence . . . .
TAKE-OFF RUNWAY 35: Climb heading 343° to 5500, then climbing left turn to 7500 via heading 234° and PIH R-269 to KNURL INT, thence . . . .
TAKE-OFF RUNWAY 17: Climbing right turn to 7500 via PIH R-269 to KNURL INT, thence . . . .
TAKE-OFF RUNWAY 21: Climbing right turn to 7500 via PIH R-269 to KNURL INT, thence . . . .

. . . . via assigned route expect filed altitude 10 minutes after departure.

WAAS CH 97502 W03A	APP CRS 031°	Rwy Idg 9060 TDZE 4444 Apt Elev 4452

RNAV (GPS) RWY 3

POCATELLO RGNL (PIH)

Inoperative table does not apply. DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (9°F) or above 40°C (104°F). If local altimeter setting not received, use Idaho Falls Rgnl altimeter setting and increase all DAs/MDAs 140 feet.
Baro-VNAV NA when using Idaho Falls Rgnl altimeter setting.

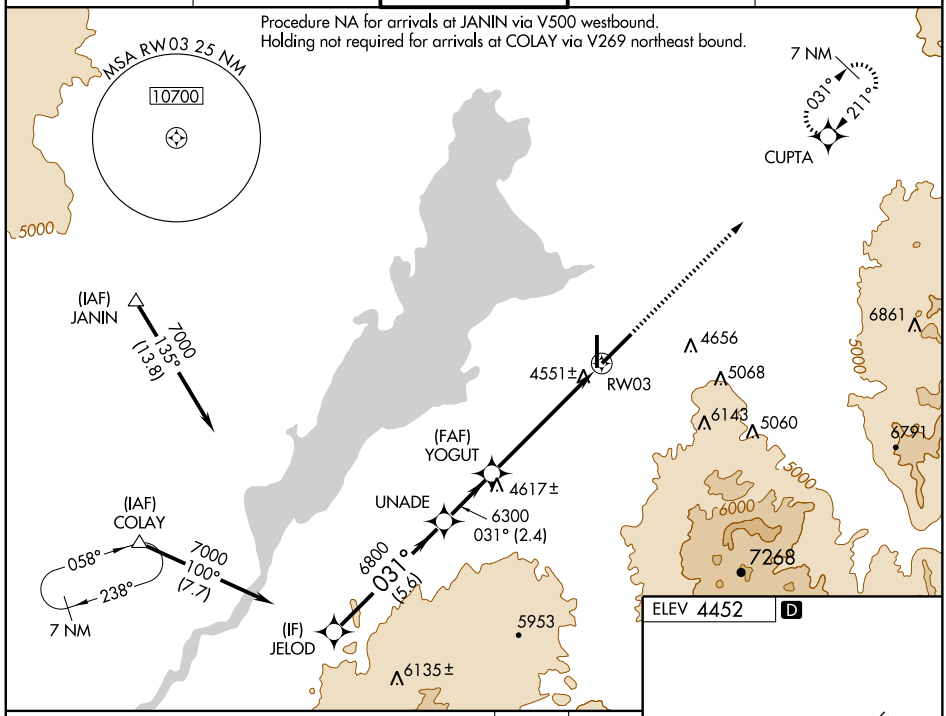
Circling NA southeast of Rwy 3-21.
Visibility reduction by helicopters NA.

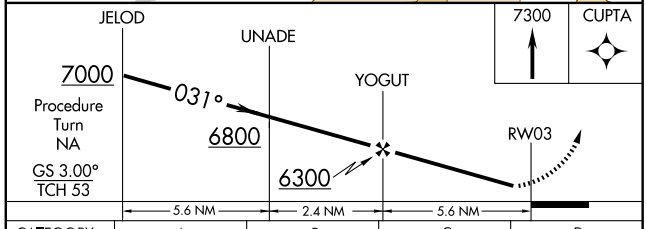
ODALS

MISSED APPROACH: Climb to 7300 direct CUPTA and hold.

ATIS	SALT LAKE CENTER	POCATELLO TOWER★	GND CON	UNICOM
135.625	128.35 239.25	119.1 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrivals at JANIN via V500 westbound.
Holding not required for arrivals at COLAY via V269 northeast bound.





CATEGORY	A	B	C	D
LPV DA	4694-1 250 (300-1)			
LNAV/VNAV DA	4978-1¾ 534 (600-1¾)			
LNAV MDA	4880-1 436 (500-1)		4880-1¼ 436 (500-1¼)	4880-1½ 436 (500-1½)
CIRCLING	4980-1 528 (600-1)		4980-1½ 528 (600-1½)	5020-2 568 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9060
CH 78212	211°	TDZE	4452
W21A		Apt Elev	4452

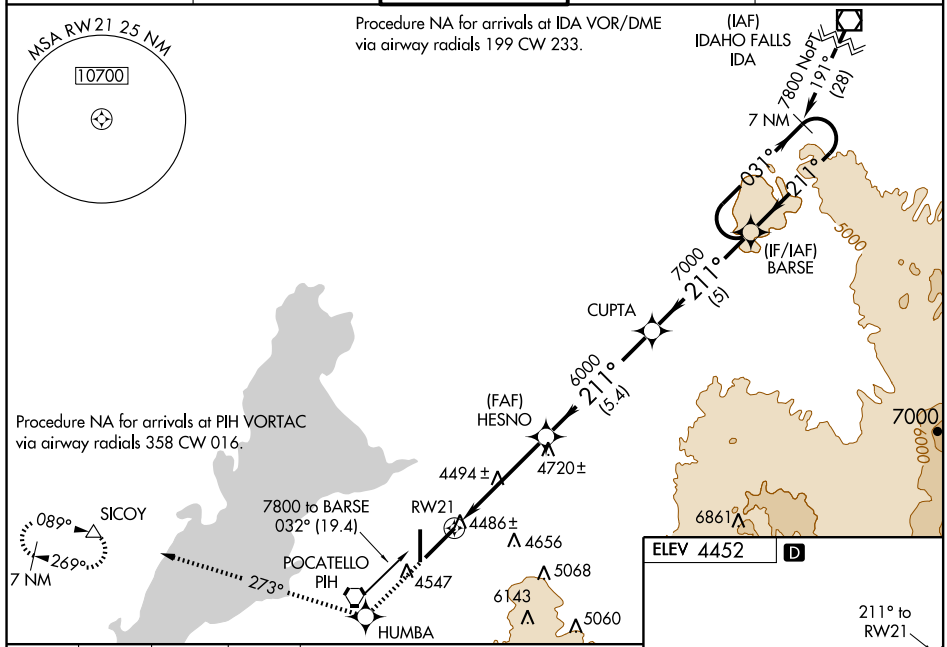
RNAV (GPS) RWY 21
POCATELLO RGNL (PIH)

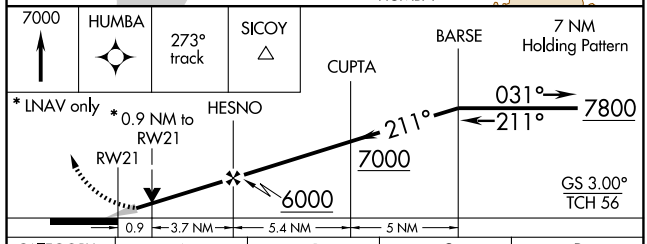
T Inoperative table does not apply to LNAV Cat D. For inoperative MALSR when using Idaho Falls altimeter setting, increase LPV all Cats visibility to 1¼ mile.
A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 39°C (102°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Idaho Falls altimeter setting and increase all DA and MDA 140 feet; increase LPV all Cats, LNAV Cat C, and Circling Cat C and D visibility ¼ mile, increase LNAV/VNAV all Cats visibility ½ mile.
Baro-VNAV and VDP NA when using Idaho Falls altimeter setting.
Circling NA southeast of Rwy 3-21. Circling NA at night to Rwy 17-35.

MALSR (A5)

MISSED APPROACH: Climb to 7000 direct HUMBA and via 273° track to SICOY and hold.

ATIS	SALT LAKE CENTER	POCATELLO TOWER*	GND CON	UNICOM
135.625	128.35 239.25	119.1 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	4652/24 200 (200-½)			
LNAV/VNAV DA	4797/40 345 (400-¾)			
LNAV MDA	4780/24 328 (400-½)			4780/50 328 (400-1)
CIRCLING	4820-1 368 (400-1)	4920-1 468 (500-1)	4920-1½ 468 (500-1½)	5020-2 568 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC PIH 112.6 Chan 73	APP CRS 211°	Rwy Idg 9060 TDZE 4452 Apt Elev 4452

VOR/DME or TACAN RWY 21

POCATELLO RGNL (PIH)

T Circling NA Southeast of Rwy 3-21. For inoperative MALSR increase S-21 Cat. D and E visibility to 1¼.

MALSR

MISSED APPROACH: Climb to 7400 direct PIH VORTAC, continue climb via PIH VORTAC R-269, then right turn direct PIH VORTAC and hold (TACAN aircraft continue via PIH VORTAC R-269 to SICOY/PIH 10 DME and hold W, right turns, 089° inbound).

ATIS	SALT LAKE CENTER	POCATELLO TOWER★	GND CON	UNICOM
135.625	128.35 239.25	119.1 (CTAF) L 257.8	121.9	122.95

TACAN MISSED APCH FIX

SICOY PIH 10

R-269 089° 112.6 PIH Chan 25 269°

Hold in lieu not authorized for Cat E.

IDAHO FALLS 113.85 IDA Chan 85 (Y)

(IAF) JEGLO INT PIH 29 IDA 20.1

8200 177° (20.1) R-031

8200 NoPT 211° (10) R-177

MSA PIH 25 NM

130° 7600 220°

6800

040° 10700

10 NM

031° 1 min 211°

5000

(IAF) GULBE PIH 19

6400 211° (9)

CATRI PIH 10

FALGU PIH 5.9

4656

6861

6000

8949

8000

4551±

5068

6143

5060

6791

5000

R-269 269° 089°

8200 to GULBE 031° (19)

POCATELLO 112.6 PIH Chan 73

ELEV 4452 D

211° 5.6 NM from FAF

21

17

TDZE 4452

9060 X 150

7150 X 100

TWR 4557

35

7400 | PIH 112.6 | PIH R-269 | PIH

GULBE PIH 19 One Minute Holding Pattern

CATRI PIH 10

FALGU PIH 5.9 3.21° TCH 58

RW21 PIH 4.4

031° 8200

211° 211°

6400

5020

VGSI and descent angles not coincident.

1.5 4.1 NM 9 NM

CATEGORY	A	B	C	D	E
S-21	4840/24 388 (400-½)			4840/50 388 (400-1)	
CIRCLING	4840-1 388 (400-1)	4920-1 468 (500-1)	4920-1½ 468 (500-1½)	5020-2 568 (600-2)	

REIL Rwy 17

HIRL Rwy 3-21 L

MIRL Rwy 17-35 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC PIH 112.6 Chan 73	APP CRS 033°	Rwy Idg 9060 TDZE 4444 Apt Elev 4452

VOR or TACAN RWY 3

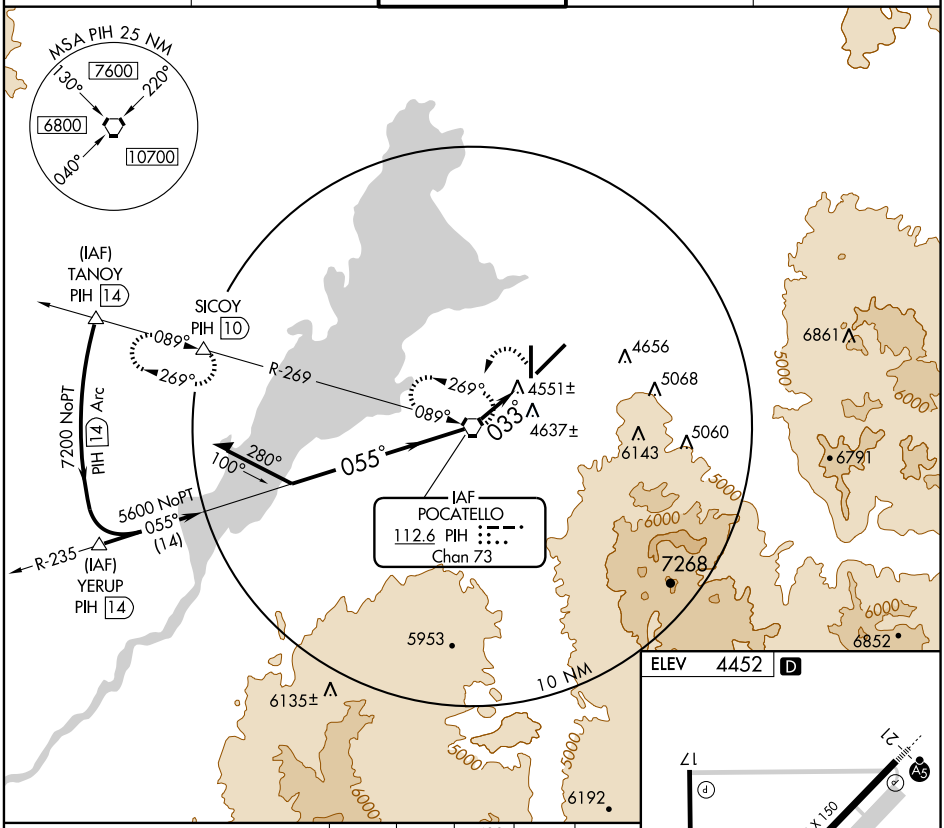
POCATELLO RGNL (PIH)

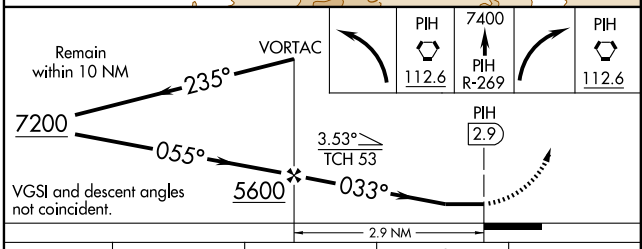
Circling not authorized Southeast of Rwy 3-21. Inoperative table does not apply.

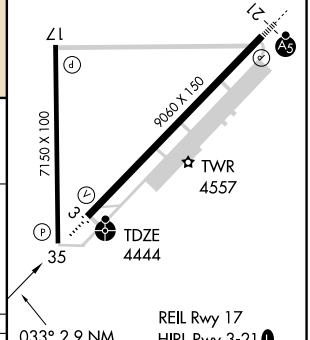
ODALS

MISSED APPROACH: Climbing left turn direct PIH VORTAC, continue to 7400 via PIH VORTAC R-269, then right turn direct PIH VORTAC and hold (TACAN aircraft continue via R-269 to SICOY/PIH 10 DME and hold W, right turns, 089° inbound).

ATIS	SALT LAKE CENTER	POCATELLO TOWER★	GND CON	UNICOM
135.625	128.35 239.25	119.1 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-3	4940-1 496 (500-1)			NA
CIRCLING	4940-1 488 (500-1)		4940-1½ 488 (500-1½)	NA

FAF to MAP 2.9 NM

Knots	60	90	120	150	180
Min:Sec	2:54	1:56	1:27	1:10	0:58

NW-1, 14 JAN 2010 to 11 FEB 2010

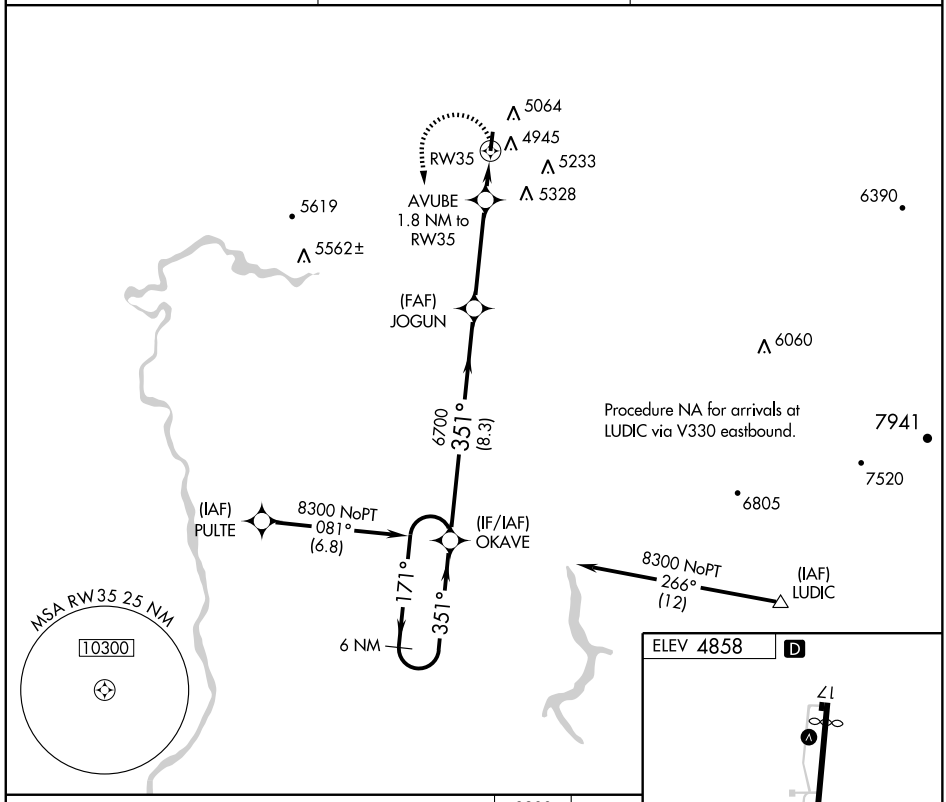
APP CRS	Rwy Idg	TDZE	Apt Elev
351°	3900	4858	4858

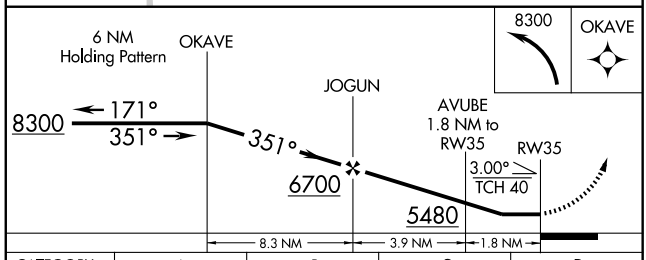
RNAV (GPS) RWY 35
REXBURG-MADISON COUNTY (RXE)

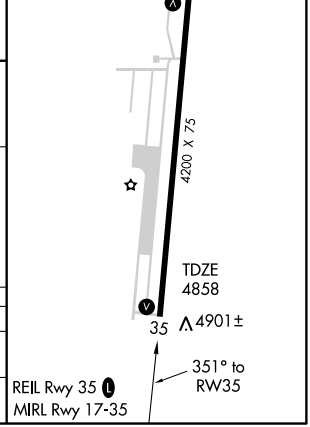
If local altimeter setting not received, use Idaho Falls Rgnl altimeter setting and increase all MDAs 80 feet. When VGSI inoperative, procedure NA at night. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 8300 direct OKAVE and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.075	128.35 239.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5260-1 402 (500-1)		5260-1¼ 402 (500-1¼)	
CIRCLING	5380-1 522 (600-1)	5580-1 722 (800-1)	5580-2 722 (800-2)	5620-2½ 762 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME IDA	APP CRS	Rwy Idg	3900
113.85	016°	TDZE	4858
Chan 85 (Y)		Apt Elev	4858

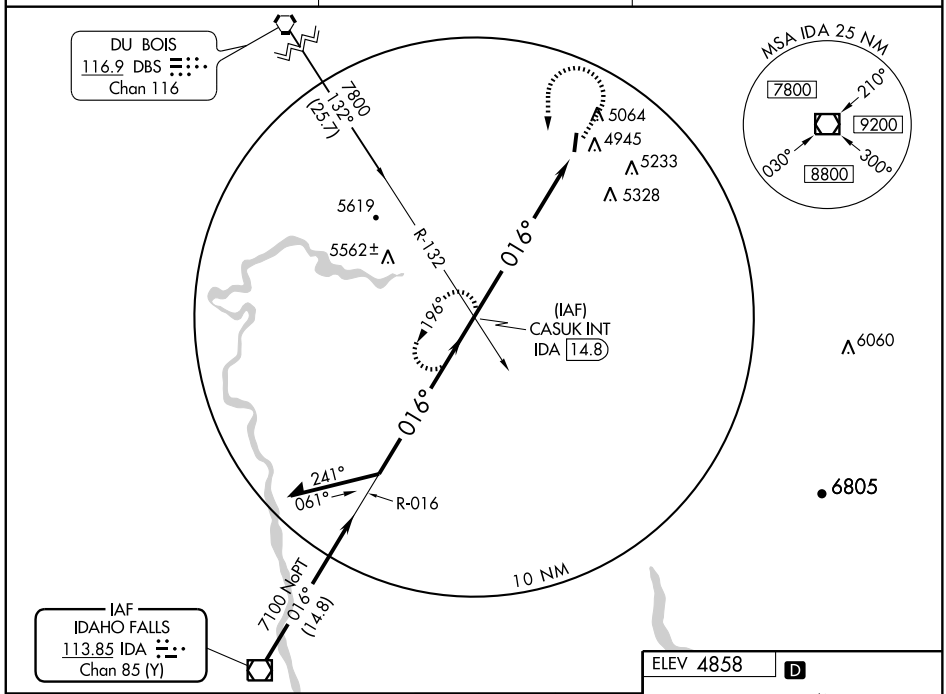
VOR RWY 35

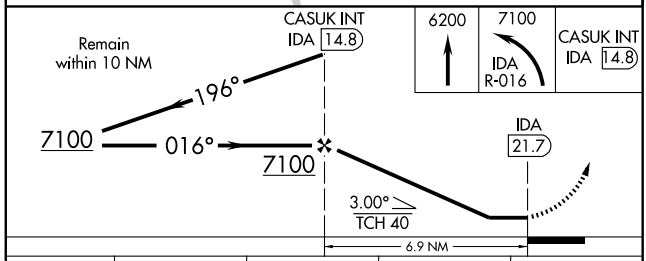
REXBURG-MADISON COUNTY (RXE)

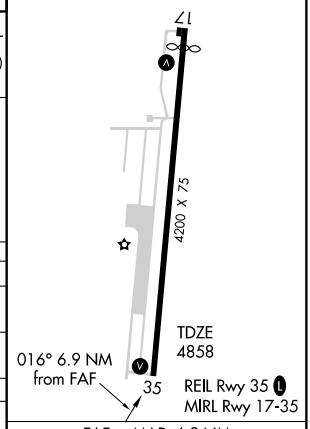
T ANA — If local altimeter setting not received, use Idaho Falls Rgnl altimeter setting minima.

MISSED APPROACH: Climb to 6200 then climbing left turn to 7100 via IDA R-016 to CASUK Int/IDA 14.8 DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.075	128.35 239.25	122.8 (CTAF) L







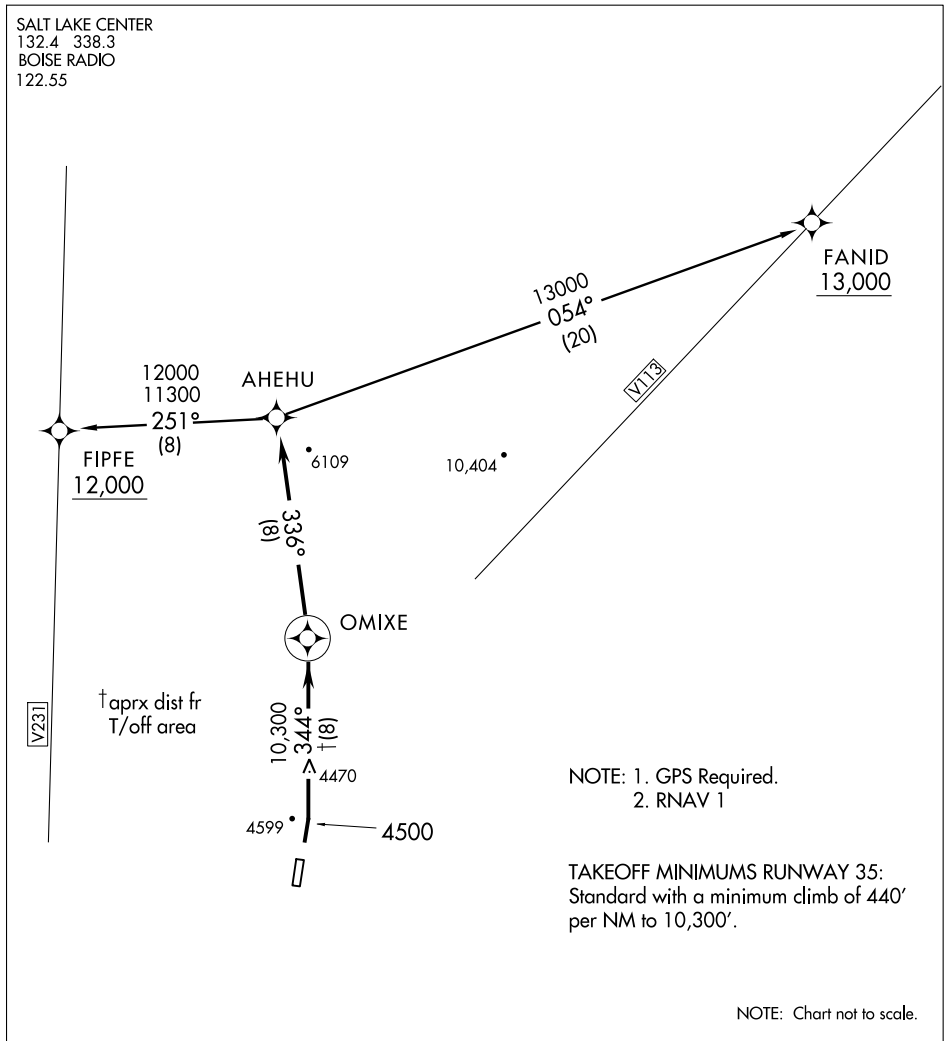
CATEGORY	A	B	C	D
S-35	5640-1 782 (800-1)	5640-1¼ 782 (800-1¼)	5640-2¼ 782 (800-2¼)	5640-2½ 782 (800-2½)
CIRCLING	5640-1 782 (800-1)	5640-1¼ 782 (800-1¼)	5640-2¼ 782 (800-2¼)	5660-2½ 802 (900-2½)
IDAHO FALLS RGNL ALTIMETER SETTING MINIMUMS				
S-35	5820-1¼ 962 (1000-1¼)	5820-1½ 962 (1000-1½)	5820-3 962 (1000-3)	
CIRCLING	5820-1¼ 962 (1000-1¼)	5820-1½ 962 (1000-1½)	5820-3 962 (1000-3)	

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

NW-1, 14 JAN 2010 to 11 FEB 2010

AHEHU ONE DEPARTURE (RNAV)

SALMON/ LEMHI COUNTY (SMN)
SALMON, IDAHO



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: NA.

TAKE-OFF RUNWAY 35: Climb runway heading to 4500′, then climbing left turn to 10,300′ via 344° course to OMIXE WP, then via 336° course to AHEHU WP. Thence ....

FANID TRANSITION (AHEHU1.FANID):

FIPFE TRANSITION (AHEHU1.FIPFE):

NW-1, 14 JAN 2010 to 11 FEB 2010

SALMON, IDAHO

AL-9513 (FAA)

APP CRS	Rwy Idg	N/A
164°	TDZE	N/A
	Apt Elev	4043

RNAV (GPS) -C

SALMON/LEMHI COUNTY (SMN)

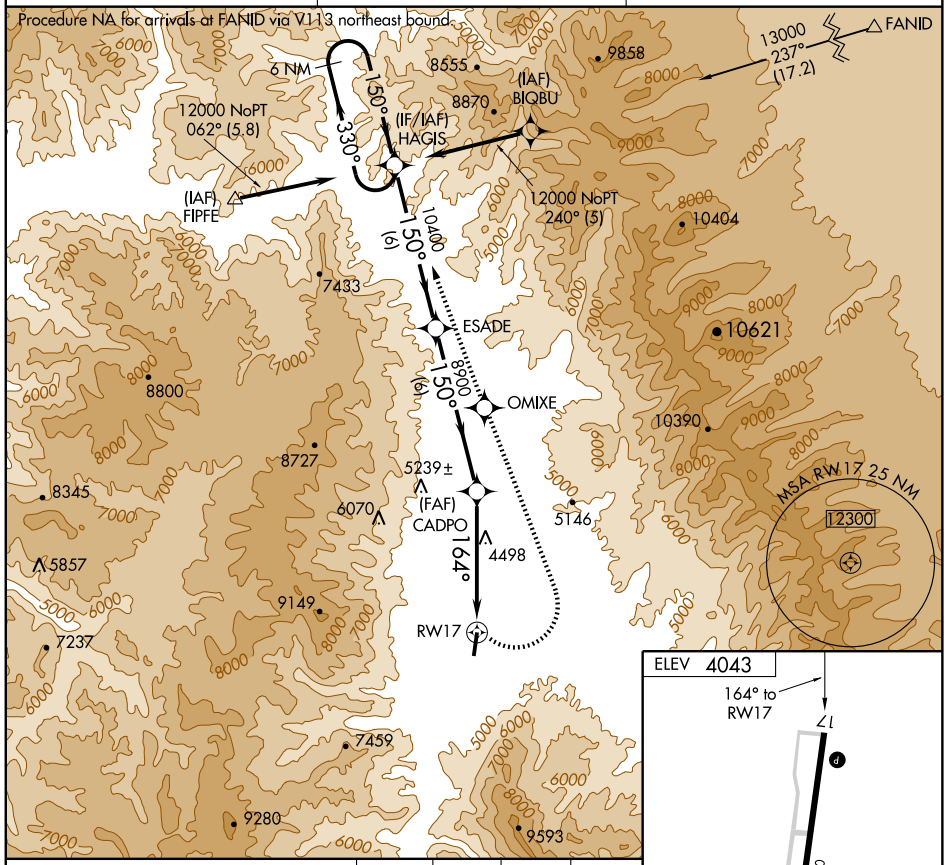
T
ANA

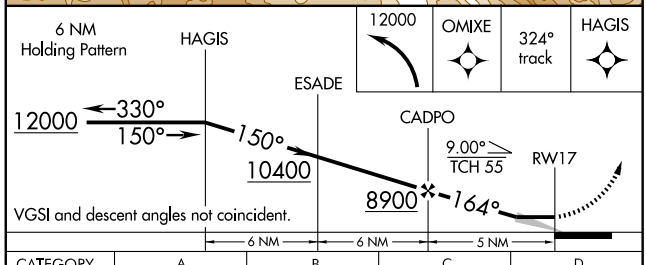
DME/DME RNP -0.3 NA.

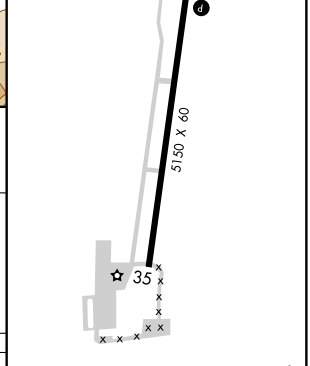
MISSED APPROACH: Climbing left turn to 12000 direct OMIXE and via 324° track to HAGIS and hold. Continue climb-in-hold to 12000.

AWOS-3	SALT LAKE CENTER	UNICOM
135.075	132.4 338.3	122.8 (CTAF) L

Procedure NA for arrivals at FANID via V113 northeast bound.







CATEGORY	A	B	C	D
CIRCLING	7400-1¼ 3357 (3400-1¼)	7400-1½ 3357 (3400-1½)	NA	

REIL Rwy 17 L

MIRL Rwy 17-35 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME LKT	APP CRS	Rwy Idg	N/A
113.5	038°	TDZE	N/A
Chan 82		Apt Elev	4043

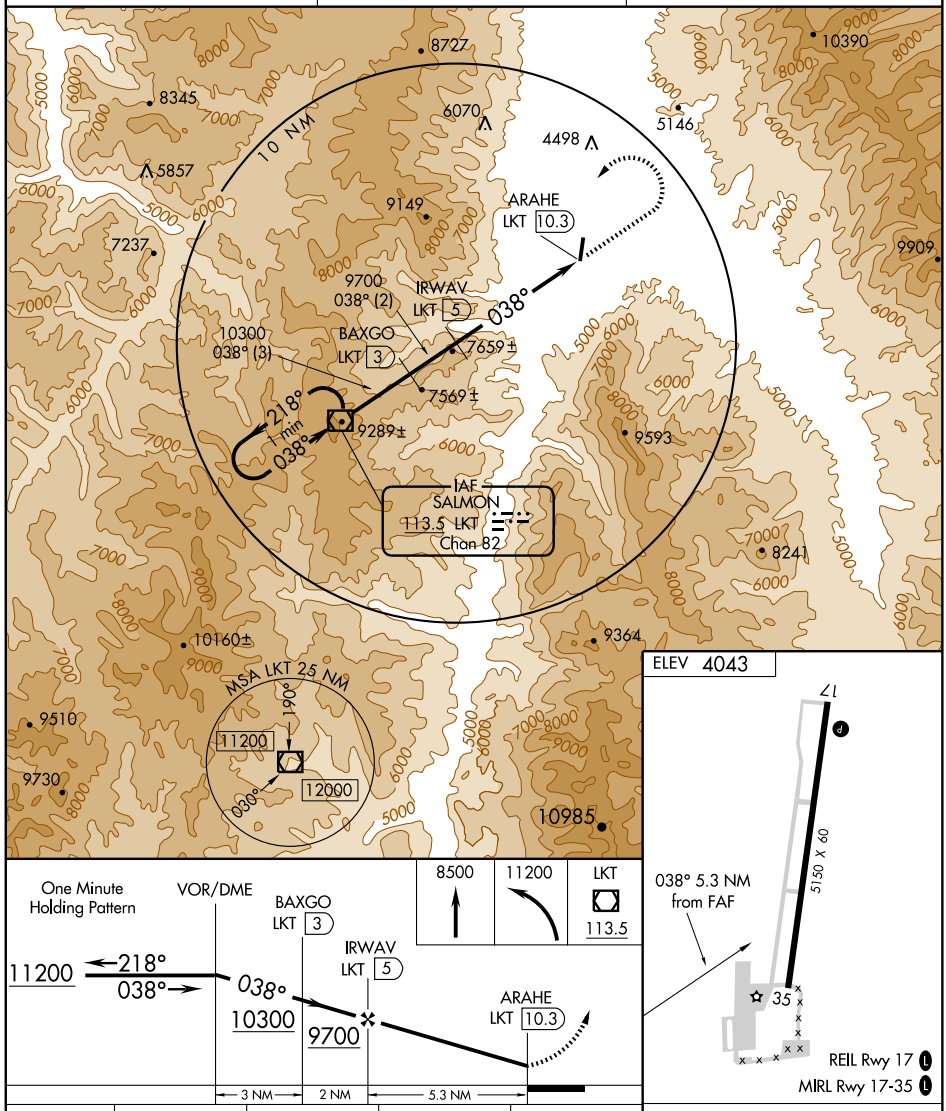
VOR/DME-B

SALMON/LEMHI COUNTY (SMN)

T
NA

MISSED APPROACH: Climb to 8500 then climbing left turn to 11200 direct LKT VOR/DME and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
135.075	132.4 338.3	122.8 (CTAF)



CATEGORY	A	B	C	D
CIRCLING	8000-1¼ 3957 (4000-1¼)	8000-1½ 3957 (4000-1½)	8000-3 3957 (4000-3)	NA

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RPO	APP CRS	Rwy Idg	N/A
109.1	014°	TDZE	N/A
Chan 28		Apt Elev	2131

LOC/DME-A
SANDPOINT (SZT)

T
A NA Circling not authorized west of Rwy 1-19.

MISSED APPROACH: Climb to 8000 via heading 014° to I-RPO 10 DME, then climbing right turn via SZT bearing 030° to SZT NDB, cross SZT NDB at 8000, then via SZT bearing 181° and COE R-359 to COE VOR/DME and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.425	123.95 282.3	122.7 (CTAF) L

ADF REQUIRED

ENROUTE FACILITIES

FEEDER FACILITIES

10 NM

I-RPO 10

210°

LOCALIZER 109.1
I-RPO
Chan 28

2330

6195

ROPLE
I-RPO 2

SANDPOE
264 SZT

FINTA
I-RPO 6.2

2862±

3219±

3819±

001°

4900

014°

(2.9)

4684

CORDU
I-RPO 9.1

5600

014°

(6.9)

INOBE
I-RPO 16

4960

4558

194°

R-359

MSA SZT 25 NM
8800
290°
7700
020°

7000
348° (18.6)

11000
240°
(27.7)
CLASS

231°
051°
R-231

IAF
COEUR D'ALENE
108.8 COE
Chan 25

SPOKANE
7000
048°
(35)

ELEV 2131
MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L

5501 X 75

014°

INOBE I-RPO 16	8000 014°	I-RPO 10	SZT 030°	SZT 264 at 8000	SZT 181° COE R-359	COE 108.8

7000 014° 5600 4900

CORDU I-RPO 9.1
FINTA I-RPO 6.2
ROPLE I-RPO 2

Procedure Turn NA

6.9 NM 2.9 NM 4.2 NM 0.9

CATEGORY	A	B	C	D
CIRCLING	3120-1¼ 989 (1000-1¼)	3120-1½ 989 (1000-1½)	3120-3 989 (1000-3)	

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

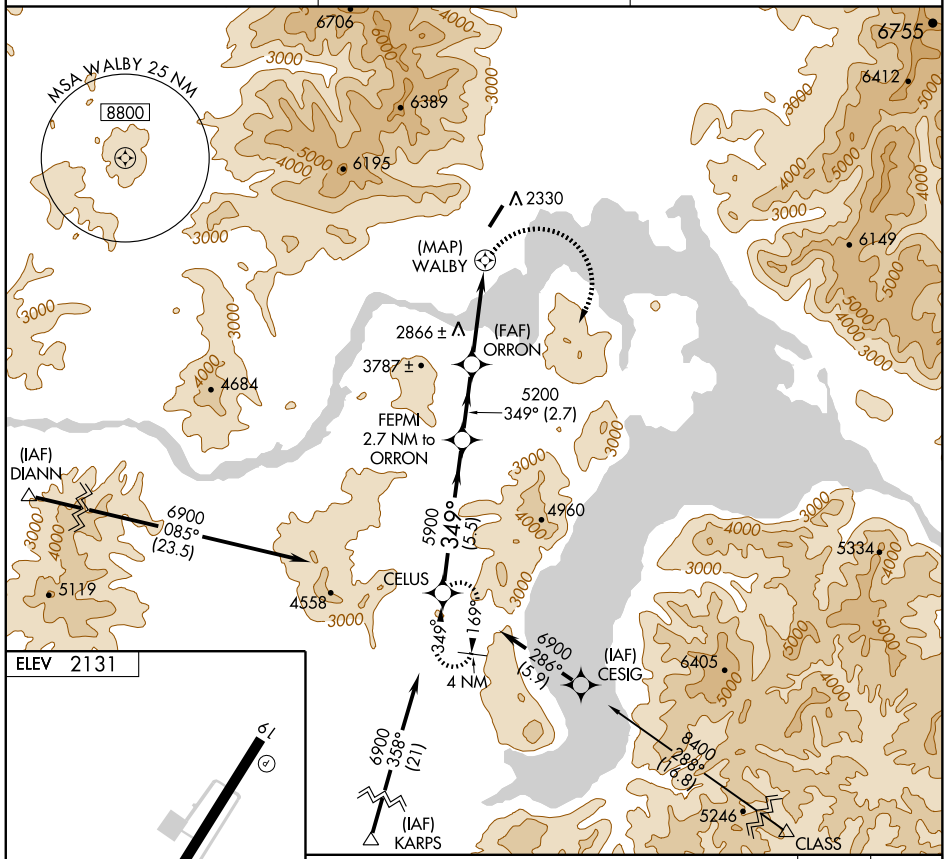
APP CRS	Rwy Idg	N/A
349°	TDZE	N/A
	Apt Elev	2131

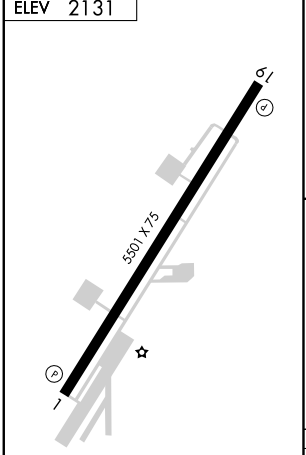
RNAV (GPS)-B
SANDPOINT (SZT)

If local altimeter setting not received procedure NA.
Circling NA west of Rwys 1/19.
DME/DME RNP-0.3 NA.

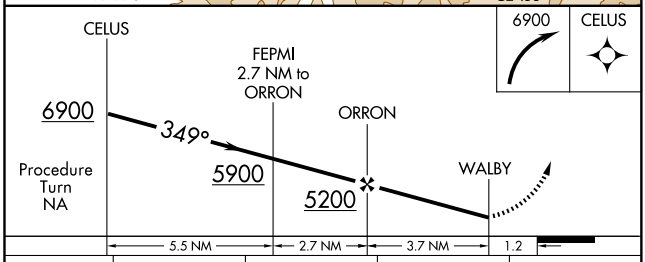
MISSED APPROACH: Climbing right turn to 6900 direct CELUS and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.425	123.95 282.3	122.7 (CTAF) L



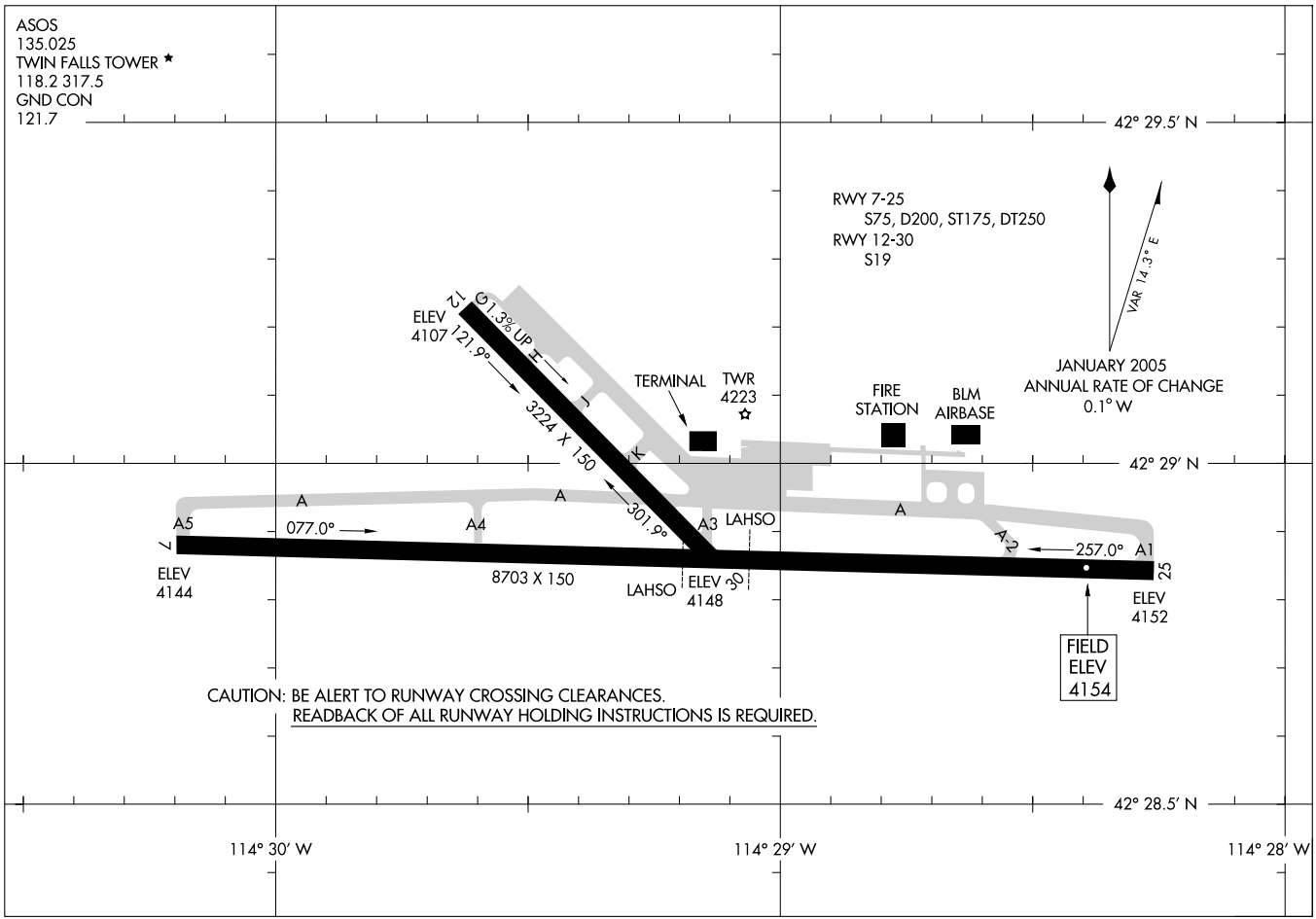


MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L



CATEGORY	A	B	C	D
CIRCLING	3720-1¼ 1589 (1600-1¼)	3720-1½ 1589 (1600-1½)	3720-3 1589 (1600-3)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010



AIRPORT DIAGRAM

TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)
TWIN FALLS, IDAHO
AL-885 (FAA)

LOC I-TWF	APP CRS	Rwy Idg	8703
108.3	255°	TDZE	4154
		Apt Elev	4154

ILS or LOC RWY 25

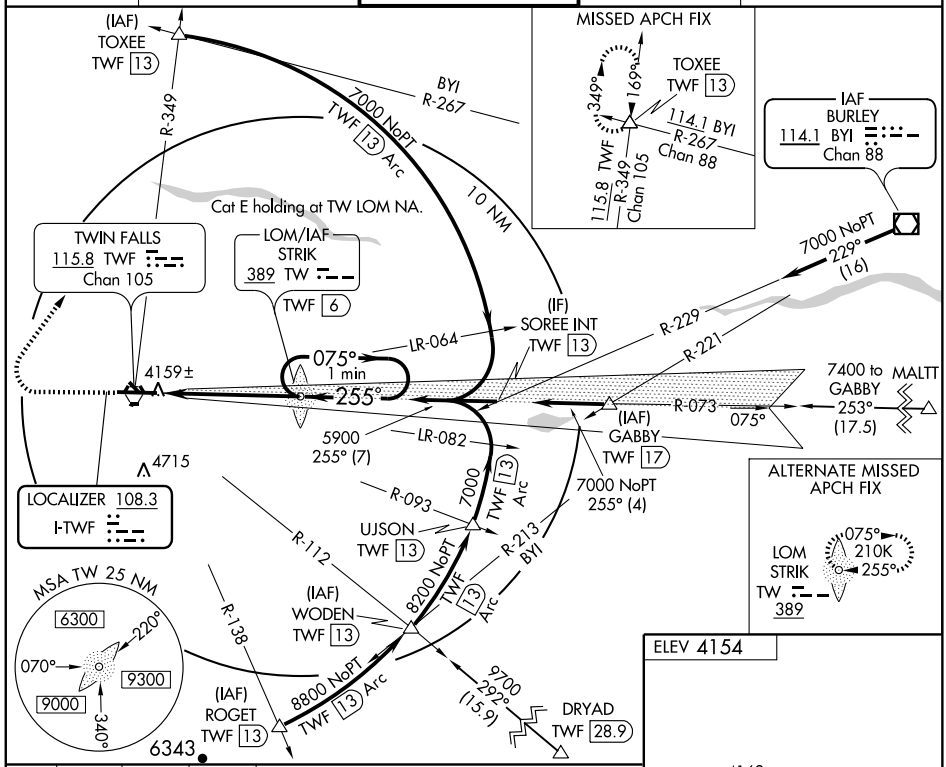
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

When local altimeter setting not received, use Jerome County altimeter setting and increase all DA 49 feet, and all MDA 60 feet, increase circling Cat C and D visibility ¼ mile. For inoperative MALSR, increase S-ILS 25 Cat E visibility ¼ mile and S-LOC 25 Cat D ¼ mile, Cat E ½ mile. For inoperative MALSR when using Jerome County altimeter setting, increase S-ILS 25 Cat E visibility ¼ mile and S-LOC 25 Cat E visibility ½ mile.

MALSR

MISSED APPROACH: Climb to 4600 then climbing right turn to 7000 via heading 020° and TWF VORTAC R-349 to TOXEE INT/TWF 13 DME and hold.

ASOS	TWIN FALLS APP CON★	TWIN FALLS TOWER★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95



CATEGORY	A	B	C	D	E
S-ILS 25	4354-½ 200 (200-½)				
S-LOC 25	4480-½ 326 (400-½)			4480-¾ 326 (400-¾)	
CIRCLING	4680-1 526 (600-1)		4700-1½ 546 (600-1½)	4780-2 626 (700-2)	5020-3 866 (900-3)

REIL Rwy 7 L
HIRL Rwy 7-25 L

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM TW	APP CRS		
389	255°	Rwy Idg	8703
		TDZE	4154
		Apt Elev	4154

NDB RWY 25

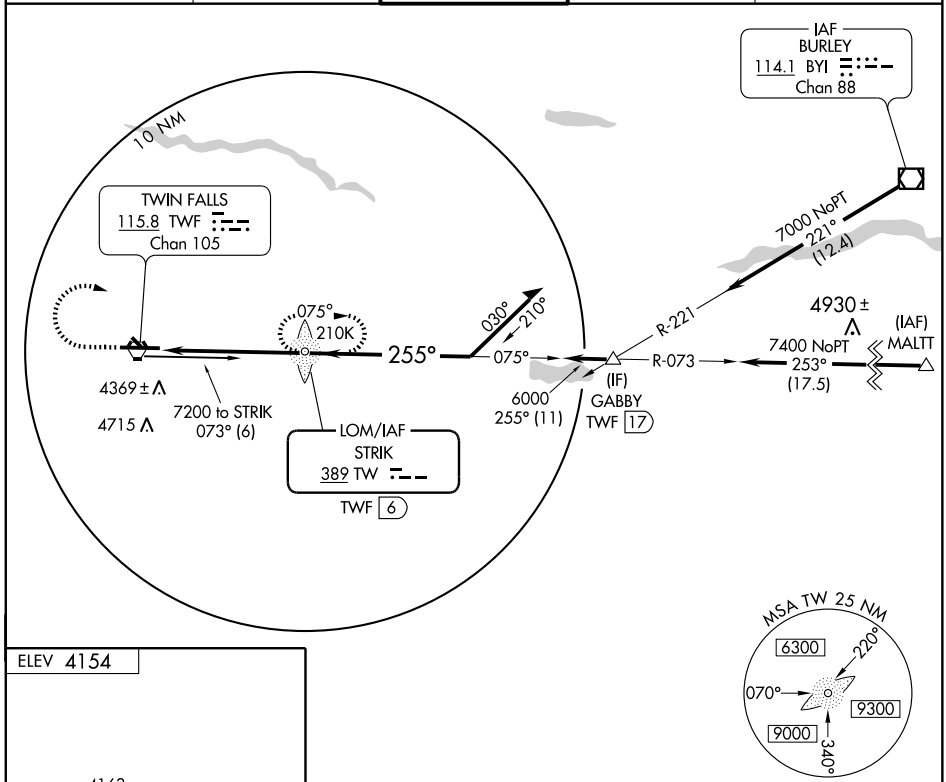
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

When local altimeter setting not received, use Jerome altimeter setting and increase all MDA 60 feet and Circling Cats C and D visibility ¼ mile.

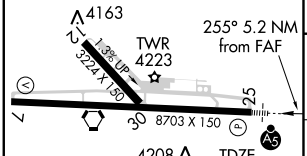
MALSR

MISSED APPROACH: Climb to 4800 then climbing right turn to 6000 direct STRIK LOM and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95

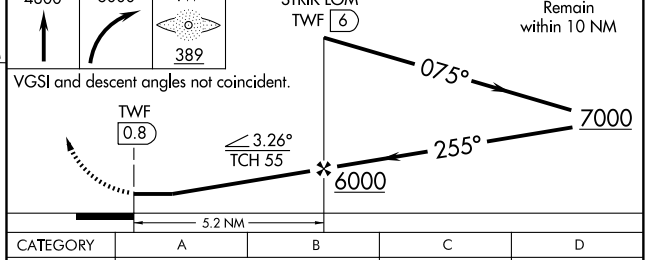


ELEV 4154



REIL Rwy 7 L
HIRL Rwy 7-25 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D
S-25	4680-¾	526 (600-¾)	4680-1 526 (600-1)	4680-1½ 526 (600-1½)
CIRCLING	4680-1 526 (600-1)	4720-1 566 (600-1)	4740-1½ 586 (600-1½)	4800-2 646 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	8703
CH 40211	075°	TDZE	4149
W07A		Apt Elev	4154

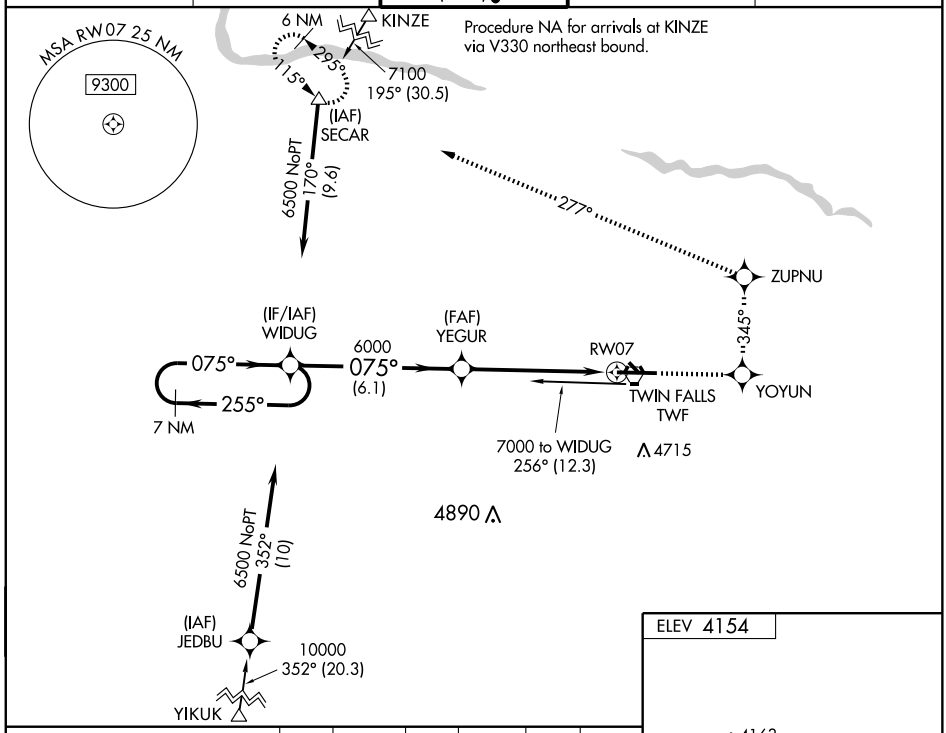
RNAV (GPS) RWY 7

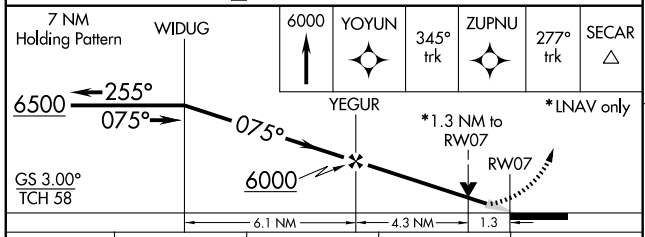
TWIN FALLS/ JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

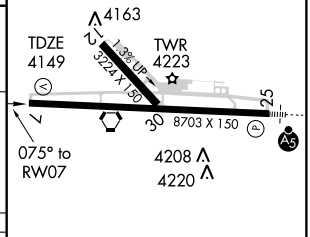
Baro-VNAV NA when using Jerome altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (104°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Jerome altimeter setting and increase all DA/MDA 60 feet and increase LPV and LNAV/VNAV all Cats, and LNAV Cats C and D visbility ¼ mile. VDP NA when using Jerome altimeter setting.

MISSED APPROACH: Climb to 6000 direct YOYUN and via 345° track to ZUPNU and via 277° track to SECAR and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95







CATEGORY	A	B	C	D
LPV DA	4399-¾ 250 (300-¾)			
LNAV/ VNAV DA	4668-1¾ 519 (600-1¾)			
LNAV MDA	4620-1 471 (500-1)		4620-1¼ 471 (500-1¼)	4620-1½ 471 (500-1½)
CIRCLING	4680-1 526 (600-1)	4720-1 566 (600-1)	4740-1½ 586 (600-1½)	4800-2 646 (700-2)

REIL Rwy 7 L
HIRL Rwy 7-25 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS		
CH 56311	255°	Rwy Idg	8703
W25A		TDZE	4154
		Apt Elev	4154

RNAV (GPS) RWY 25

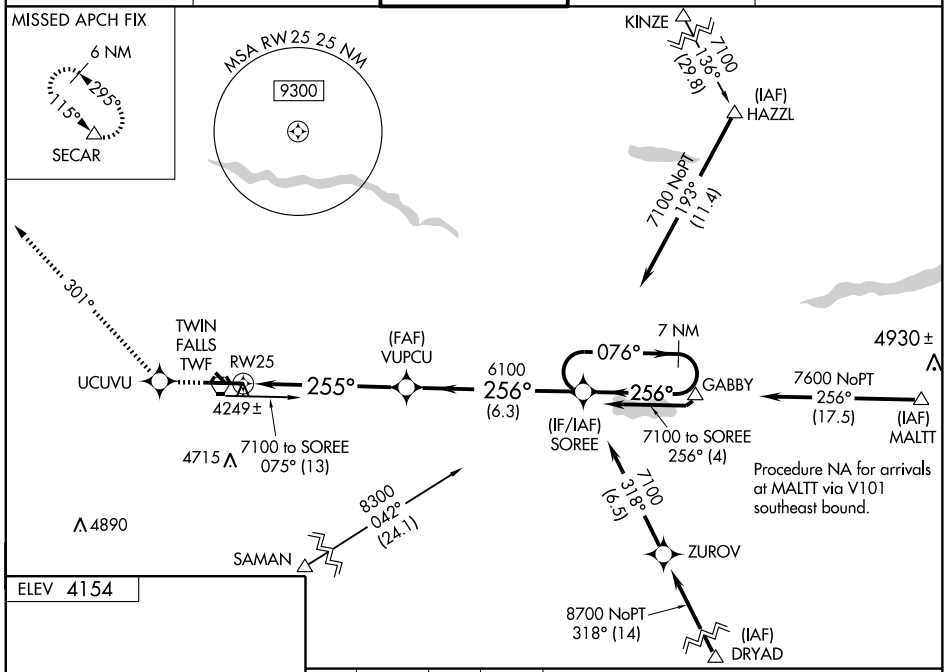
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

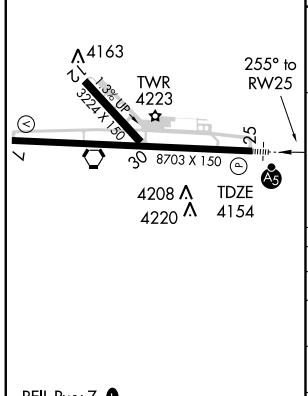
Baro-VNAV NA when using Jerome altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 40°C (104°F). DME/DME RNP-0.3 NA. For inoperative MALSR, increase LNAV visibility Cat D to 1 mile. When local altimeter setting not received, use Jerome altimeter setting and increase all DA/MDA 60 feet and all visibilities ¾ mile. When using Jerome altimeter setting, inoperative table does not apply. VDP NA when using Jerome altimeter setting.

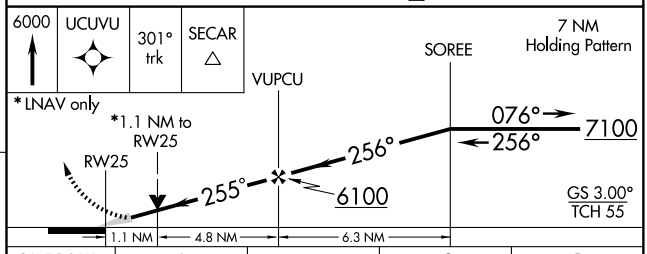
MALSR

MISSED APPROACH: Climb to 6000 direct UCUVU and via 301° track to SECAR and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95







CATEGORY	A	B	C	D
LPV DA	4354-½ 200 (200-½)			
LNAV/VNAV DA	4531-¾ 377 (400-¾)			
LNAV MDA	4560-½ 406 (500-½)		4560-¾ 406 (500-¾)	4560-1 406 (500-1)
CIRCLING	4680-1 526 (600-1)	4720-1 566 (600-1)	4740-1½ 586 (600-1½)	4800-2 646 (700-2)

REIL Rwy 7 L
HIRL Rwy 7-25 L

NW-1, 14 JAN 2010 to 11 FEB 2010

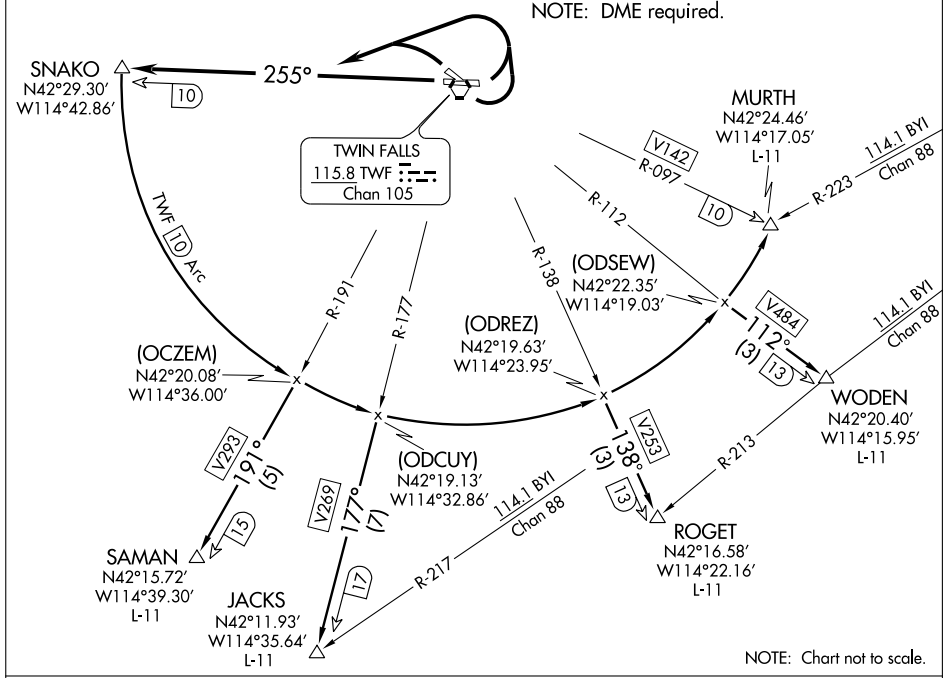
SNAKO ONE DEPARTURE

GND CON
121.7
TWIN FALLS TOWER ★
118.2 317.5
TWIN FALLS DEP CON ★
126.7 353.75
ASOS 135.025

NOTE: ROGET transition requires a minimum climb of 290′ per NM to 7600′.

NOTE: MURTH transition requires a minimum climb of 210′ per NM to 10500′.

NOTE: DME required.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 25: Climb runway heading, thence. . . .

TAKE-OFF RUNWAYS 7, 30, 12: Climbing left turn, thence. . . .

. . . .intercept and proceed via TWF R-255 to SNAKO DME Fix, thence via (assigned transition).

JACKS TRANSITION (SNAKO1.JACKS): From over SNAKO DME Fix via 10 DME Arc and V269 to JACKS INT. Thence via (assigned route).

MURTH TRANSITION (SNAKO1.MURTH): From over SNAKO DME Fix via 10 DME Arc and V142 to MURTH INT. Thence via (assigned route).

ROGET TRANSITION (SNAKO1.ROGET): From over SNAKO DME Fix via 10 DME Arc and V253 to ROGET INT. Thence via (assigned route).

SAMAN TRANSITION (SNAKO1.SAMAN): From over SNAKO DME Fix via 10 DME Arc and V293 to SAMAN INT. Thence via (assigned route).

WODEN TRANSITION (SNAKO1.WODEN): From over SNAKO DME Fix via 10 DME Arc and V484 to WODEN INT. Thence via (assigned route).

NW-1, 14 JAN 2010 to 11 FEB 2010

TWIN FALLS, IDAHO

AL-885 (FAA)

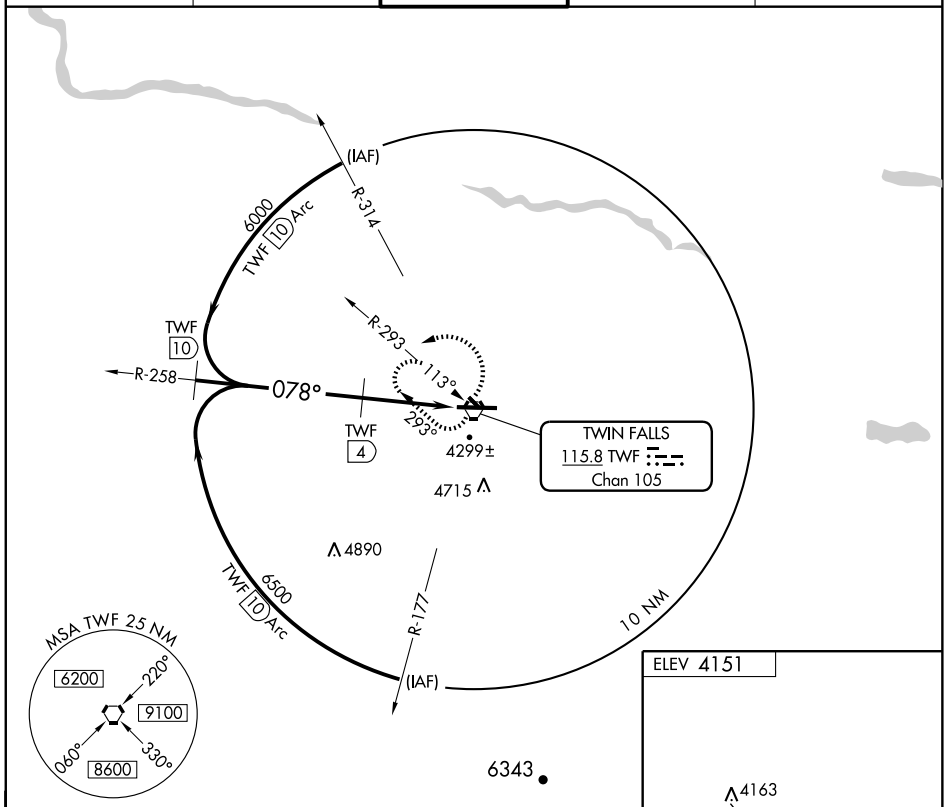
VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	078°	TDZE	4145
Chan 105		Apt Elev	4151

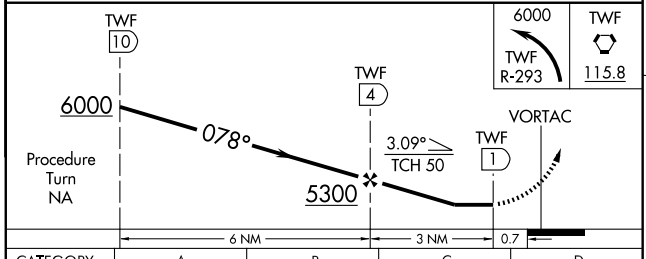
VOR/DME RWY 7

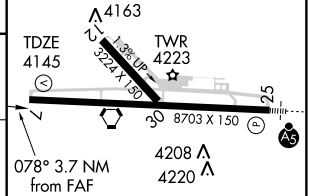
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

MISSED APPROACH: Climbing left turn to 6000 on TWF R-293 within 10 NM, return to VORTAC and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) Ⓛ 317.5	121.7	122.95







CATEGORY	A	B	C	D
S-7	4560-1 415 (500-1)			4560-1½ 415 (500-1½)
CIRCLING	4680-1 530 (600-1)		4680-1½ 530 (600-1½)	4740-2 590 (600-2)

REIL Rwy 7 Ⓛ

HIRL Rwy 7-25 Ⓛ

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	077°	TDZE	4149
Chan 105		Apt Elev	4154

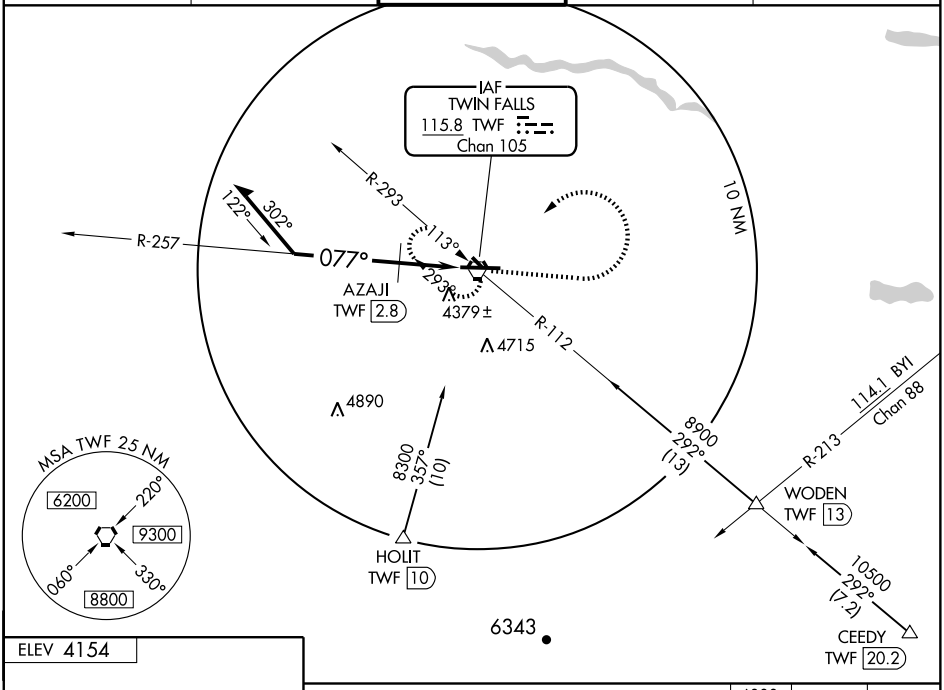
VOR RWY 7

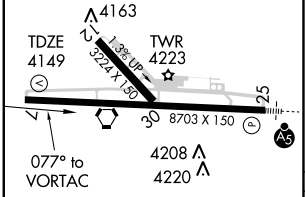
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

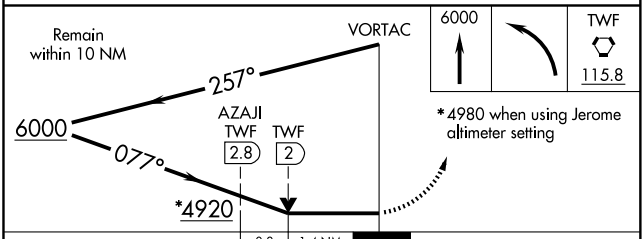
When local altimeter setting not received, use Jerome altimeter setting and increase all MDA 60 feet and visibility Cat C and D ¼ mile.
VDP NA when using Jerome altimeter setting.

MISSED APPROACH: Climb to 6000 then left turn direct TWF VORTAC and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95







CATEGORY	A	B	C	D
S-7	4920-1 771 (800-1)	4920-1¼ 771 (800-1¼)	4920-2¼ 771 (800-2¼)	4920-2½ 771 (800-2½)
CIRCLING	4920-1 766 (800-1)	4920-1¼ 766 (800-1¼)	4920-2¼ 766 (800-2¼)	4920-2½ 766 (800-2½)
AZAJI FIX MINIMUMS				
S-7	4640-1	491 (500-1)	4640-1¼ 491 (500-1¼)	4640-1½ 491 (500-1½)
CIRCLING	4680-1 526 (600-1)	4720-1 566 (600-1)	4740-1½ 586 (600-1½)	4800-2 646 (700-2)

REIL Rwy 7 L
HIRL Rwy 7-25 L

VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	248°	TDZE	4150
Chan 105		Apt Elev	4151

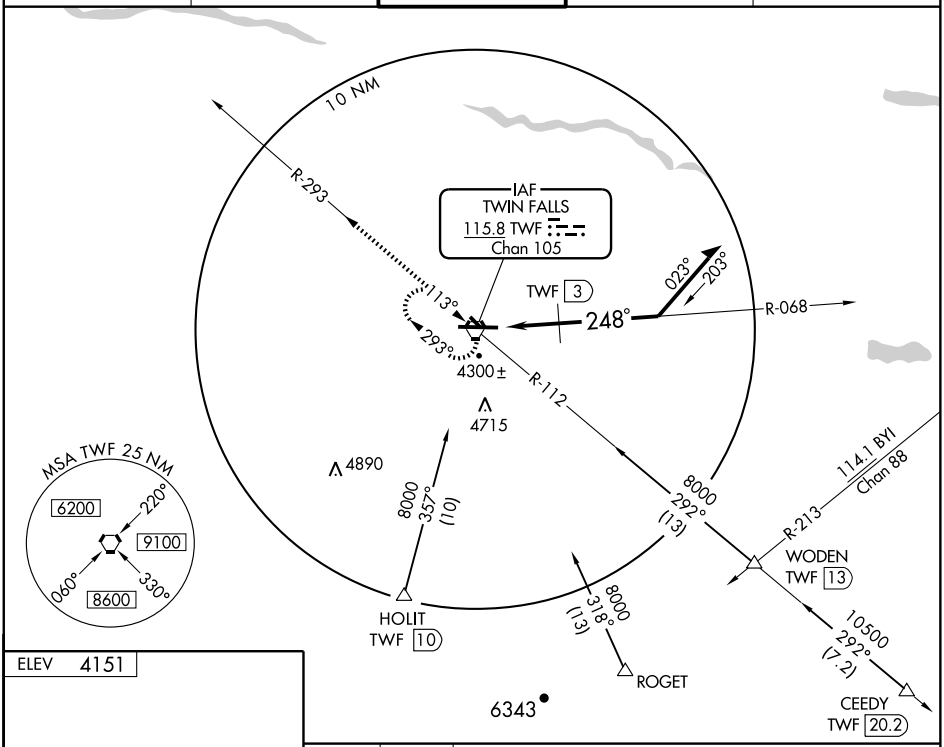
VOR RWY 25

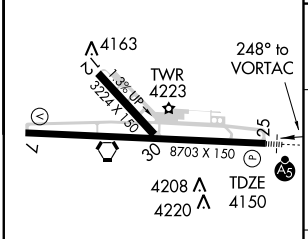
TWIN FALLS/JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

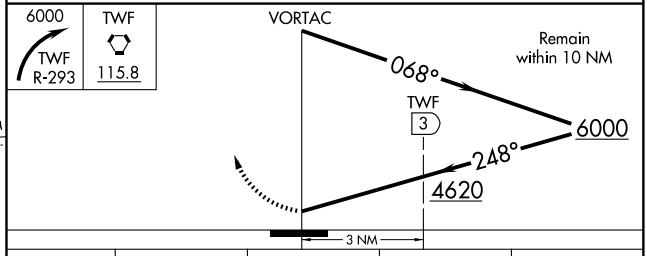
MALSR

MISSED APPROACH: Climbing right turn to 6000 on R-293 TWF VORTAC within 10 NM, return to VORTAC and hold.

ASOS	TWIN FALLS APP CON ★	TWIN FALLS TOWER ★	GND CON	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	122.95







CATEGORY	A	B	C	D
S-25	4620-½ 470 (500-½)		4620-¾ 470 (500-¾)	4620-1¼ 470 (500-1¼)
CIRCLING	4680-1 530 (600-1)		4680-1½ 530 (600-1½)	4740-2 590 (600-2)
DME MINIMA				
S-25	4560-½ 410 (500-½)			4560-1 410 (500-1)

REIL Rwy 7 L
HIRL Rwy 7-25 L

NW-1, 14 JAN 2010 to 11 FEB 2010

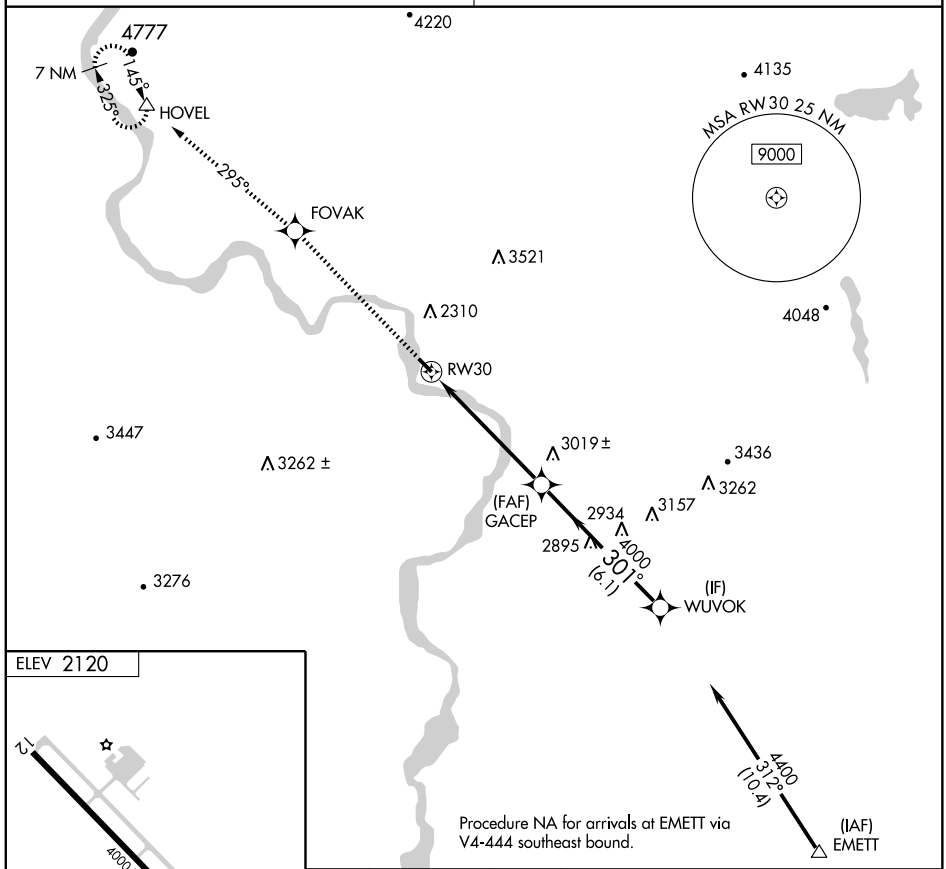
APP CRS	Rwy Idg	N/A
301°	TDZE	N/A
	Apt Elev	2120

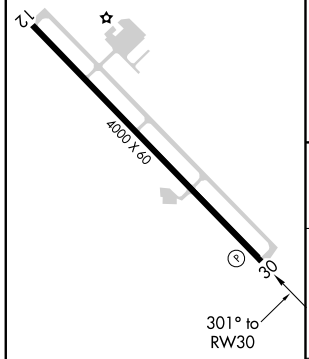
RNAV (GPS)-A
WEISER MUNI (S87)

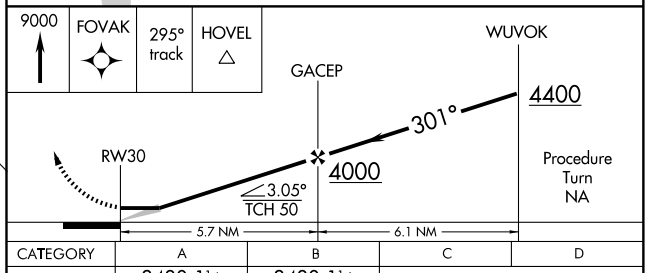
DME/DME RNP-0.3 NA. Procedure NA at night. Use Ontario altimeter setting; when not received, use Boise altimeter setting and increase all MDAs 160 feet.

MISSED APPROACH: Climb to 9000 direct FOVAK and via 295° track to HOVEL and hold, continue climb-in-hold to 9000.

SALT LAKE CENTER	UNICOM
128.05 387.15	122.8 (CTAF) L







MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

CATEGORY	A	B	C	D
CIRCLING	3480-1¼ 1360 (1400-1¼)	3480-1½ 1360 (1400-1½)	3480-3 1360 (1400-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME — ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L[1]**
RNAV (GPS) Y Rwy 10R[2]
RNAV (GPS) Y Rwy 28L[2]
VOR/DME or TACAN Rwy 10L[1]
VOR/DME or TACAN Rwy 28L[1]
[1]Category E, 900-3.
[2]Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31**[1]
VOR/DME Rwy 31[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B

NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10**[1]
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28

NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**

Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15**[1]
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3

[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**

ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27**[1]
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22**[1]
VOR or GPS-A[2]

[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1

NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**

Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**

NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B

NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**

Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**

Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25**[1]
RNAV (GPS) Rwy 29
VOR-B[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA
EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR
MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA
SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT
FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY
GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT
WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT
DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID
GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)
FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT
GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY
SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID
FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT
HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27**[12]
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24**[1]
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20**[1]
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1**[1]
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2**[1]
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26**[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B**[1]
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14**[12]
LOC/DME BC-B[23]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11**[1]
RNAV (GPS) Y Rwy 11[23]
RNAV (RNP) Z Rwy 11[2]**,**800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R**[1]
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4**[1]
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17**[12]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[23]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R**[12]
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25**[1]
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7

NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]

NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL..... **ILS or LOC Rwy 21**[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]

[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L**[1]
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]

[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12**[1]
RNAV (GPS) Rwy 12[2]

[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **NDB or GPS-A**[1]
VOR or GPS Rwy 22,1000-3[2]

[1]Category D, 1000-3.
[2]NA when Rawlins FSS closed.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22**[1]
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16**[1]
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19**[1]
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

ROCK SPRINGS, WY

ROCK SPRINGS SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31**[12]
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R**[1]
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1**[1]
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R**[1]
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[3]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A,B, 1000-2; Categories C,D, 1000-3

SPOKANE INTL ..... **ILS or LOC Rwy 3**[1]
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

NAME ALTERNATE MINIMUMS

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17**[1]
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL ..... **ILS or LOC Rwy 25**[1]
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20**[1]
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/ MCALLISTER FIELD ..... **ILS Y Rwy 27**[12]
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 16,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 34,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME — TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 16, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 16,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 34,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.
NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE,ID

BOISE AIR TERMINAL (GOWEN FIELD)

DEPARTURE PROCEDURE: **Rwys 28L,28R,** turn left **Rwys 10L,10R**, turn right. Climb on BOI R-214 within 20 NM to cross BOI VORTAC at or above MEA/MCA for direction of flight.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.
DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.
DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...
...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.
NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.
DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI

TAKE-OFF MINIMUMS: **All runways,** cross departure end of runway at or above 35' AGL.
DEPARTURE PROCEDURE: **All runways,** climb direct BURLEY (BYI) VOR/DME. Continue climb on R-305 within 10 miles to cross BYI VOR/DME: R-024 CW R-054 at or above 5500; R-055 CW R-240 at or above 8000; R-241 CW R-023 at or above 5900.
NOTE: **Rwy 2,** bridge 252' from departure end of runway, 513' left of centerline, 110' AGL/4195' MSL. Stack 2205' from departure end of runway, 857' right of centerline, 79' AGL/4236' MSL. Elevator 4092' from departure end of runway, 297' right of centerline, 133' AGL/4283' MSL. **Rwy 20,** antenna 523' from departure end of runway, 338' right of centerline, 43' AGL/4217' MSL. **Rwy 24**, tree 630' from departure end of runway, 521' right of centerline, 41' AGL/4215' MSL. Grain elevator 3106' from departure end of runway, 163' left of centerline, 137' AGL/4317' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.
DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading. **All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.
NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .**Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/ 6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 1500-2 or std. with a min. climb of 250' per NM to 6800. **Rwy 22**, 1600-2 or std. with a min. climb of 340' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 4, 22**, turn left. **All aircraft** climb direct COD VOR/DME. Climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above: COD R-350 CW R-170, 6000; or R-171 CW R-349, 11800.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FLD

TAKE-OFF MINIMUMS: **Rwy 5**, CAT A,B, 1700-2 or std. with a min. climb of 230' per NM to 4000. CAT C,D, 2600-2 or std. with a min. climb of 320' per NM to 5400.

DEPARTURE PROCEDURE: **Rwys 1,5**, turn left, climb via COE R-005 to 5400, reverse course, continue climb direct COE VOR. **Rwy 19**, turn right. **Rwy 23,** turn left, climb via COE R-232 to 5000, reverse course, continue climb direct COE VOR.

COLSTRIP, MT

COLSTRIP (M46)

AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 360' per NM to 5600.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading; **Rwy 22,** climbing left turn to heading 130°; **Rwys 4,34,** climbing right turn to heading 210°; **All aircraft** intercept and continue climb via the 170° bearing from DPY NDB to intercept GEG R-006 to GEG VORTAC.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn...**Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)
AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)
ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID

IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.

DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)

FORT LEWIS, WA

. . . . . Rwy 15, 300-1*
Rwy 33, 300-1**

* Or standard with minimum climb of 430/NM to 500.
** Or standard with minimum climb of 380/NM to 600.
Rwy 15 climb runway heading to 700 then climbing left turn direct GR LOM. Rwy 33 climb runway heading direct GR LOM. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GR LOM climb on course. All others continue climb in GR holding pattern (Hold NW, RT, 147° inbound) to cross GR LOM at or above: 071° CW 134° bearing from GR LOM, 8500; 261° CW 329° bearing from GR LOM, 1500.

GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.

NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.

NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT

HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...

...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.

NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,**1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**,1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL**. Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76'AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44'AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58'AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/ 3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30**, 1200-2 or std. with a min. climb of 320' per NM to 1300.

DEPARTURE PROCEDURE: Departure procedure limited to CAT A,B aircraft. **Rwy 30**, climb straight ahead to 1500 then climbing right turn direct LSO NDB. Continue climb in holding pattern (N, right turns, 171° inbound) to cross LSO NDB at or above 3000 direct BTG VORTAC or MEA for route of flight.

KEMMERER, WY

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR

LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY

LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT

LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID

LEWISTON-NEZ PERCE COUNTY

DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT

LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.

DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR

LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT

LIBBY

TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT

MISSION FIELD (LVM)

AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.

DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR

MADRAS MUNI (S33)

ORIG-A 09043 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)

TACOMA, WA 09127

DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787'from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735'from DER, 314' right of centerline 30'AGL/4202' MSL. Road 207'from DER, 254'right of centerline, 15' AGL/4187'MSL.

NEWPORT,OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO,OR

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...
Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...
Rwy 25, climb direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ... **Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L,28R,** climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/88' MSL. **Rwy 28R,** multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)

AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091°CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)

AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)

AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ... ...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100'AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL

DEPARTURE PROCEDURE: Aircraft departing RIW R-280 CW R-170 climb on course. All others climb to 6600, then continue climb direct RIW VOR/DME to cross RIW VOR/DME at or above 7500 before proceeding on course.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY

DEPARTURE PROCEDURE: Climb direct OCS VORTAC. Aircraft departing OCS R-205 CW R-170 climb on course. All others climb in the OCS holding pattern (E, right turns, 260°inbound) to cross OCS VORTAC at or above 7300.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149'left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . . . . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . . . . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD

TAKE-OFF MINIMUMS: **Rwys 3L,3R,** std. w/ min. climb of 400' per NM to 3600, or 1600-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 360' per NM to 3100, or 1600-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3100, or 1600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course. **Rwys 21L, 21R,** climb to 2800, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course.

NOTE: **Rwy 3L,** multiple trees beginning 5000' from departure end of runway, 530' left of centerline, up to 104' AGL/2513' MSL. Tree 1854' from departure end of runway, 773' right of centerline, 54' AGL/2030' MSL, tree 2365' from departure end of runway, 798' right of centerline, 61' AGL/2037' MSL. **Rwy 3R,** multiple trees beginning 5016' from departure end of runway, 1033' left of centerline, up to 104' AGL/2529' MSL, pole 2.5 NM from departure end of runway, 2059' left of centerline, 62' AGL/2454' MSL, hangar 92' from departure end of runway, 341' right of centerline, 5' AGL/1967' MSL, NDB 925' from departure end of runway, 270' right of centerline, 25' AGL/1987' MSL, multiple trees beginning 1870' from departure end of runway, 271' right of centerline, up to 128' AGL/3560' MSL. **Rwy 21L,** pole 316' from departure end of runway, 302' left of centerline, 33' AGL/1992' MSL, tree 926' from departure end of runway, 362' left of centerline, 50' AGL/2006' MSL, building 1057' from departure end of runway, 158' left of centerline, 19' AGL/1975' MSL, building 1061' from departure end of runway, 110' left of centerline, 19' AGL/1975' MSL. Elevator 4080' from departure end of runway, 598' left of centerline, 134' AGL/2080' MSL. **Rwy 21R,** hangar 204' from departure end of runway, 496' left of centerline, 13' AGL/1969' MSL, pole 659' from departure end of runway, 404' left of centerline, 26' AGL/1979' MSL, building, 946' from departure end of runway, 230' left of centerline, 24' AGL/1973' MSL, pole 1399' from departure end of runway, 2' left of centerline, 33' AGL/1982' MSL, elevator 2655' from departure end of runway, 1097' left of centerline, 134' AGL/2080' MSL, tree 189' from departure end of runway, 511' right of centerline, 46' AGL/1979' MSL, tree 480' from departure end of runway, 404' right of centerline, 43' AGL/1979' MSL, pole 1252' from departure end of runway, 55' right of centerline, 29' AGL/1975' MSL, pole 1427' from departure end of runway, 13' right of centerline, 33' AGL/1982' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A,B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C,D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .**Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course ...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E,right turns,253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

ANACONDA, MONTANA

AL-6986 (FAA)

VOR/DME CPN 111.6 Chan 53	APP CRS 307°	Rwy Idg N/A TDZE N/A Apt Elev 5030

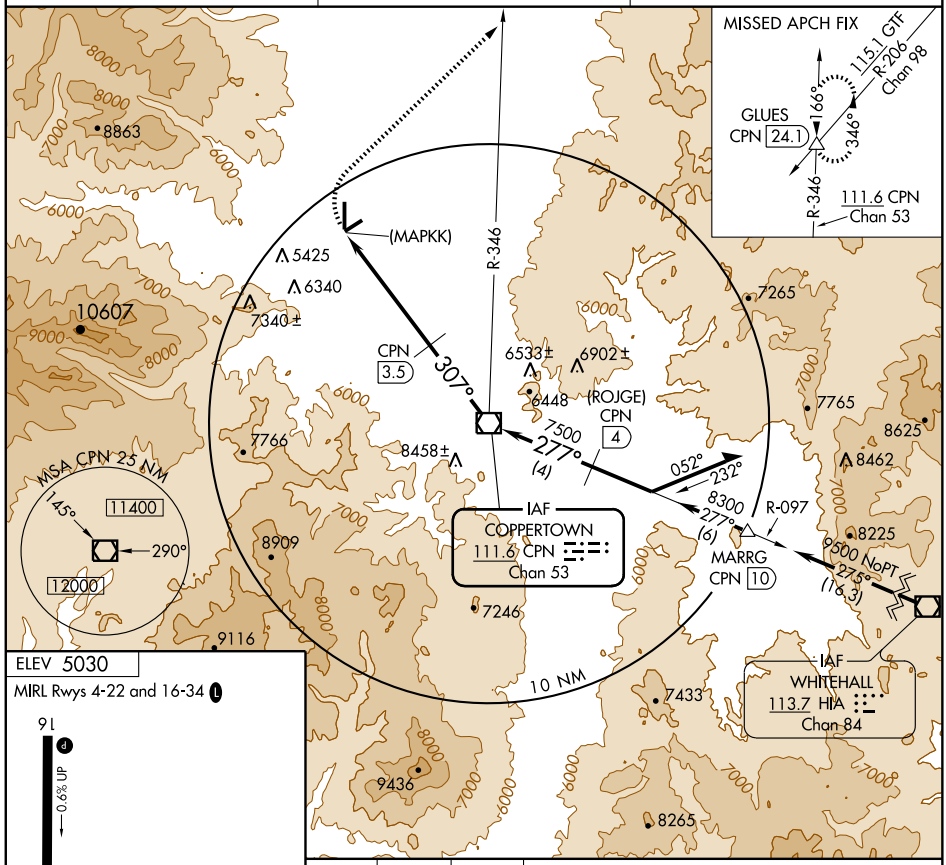
VOR/DME or GPS-A

ANACONDA/ BOWMAN FIELD (3U3)

V
A NA — Use Butte (BTM) altimeter setting; when not received, procedure NA.

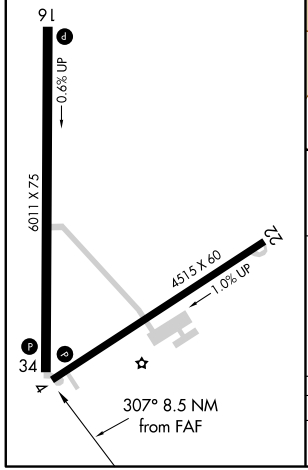
MISSED APPROACH: Climbing right turn to 9200 via heading 030° to intercept CPN R-346 to GLUES and hold.

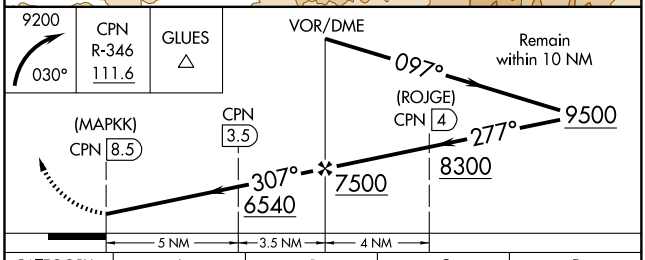
AWOS-A 122.8 L	SALT LAKE CENTER 132.4 338.3	UNICOM 122.8 (CTAF) L



ELEV 5030

MIRL Rwys 4-22 and 16-34 L





CATEGORY	A	B	C	D
CIRCLING	6140-1¼ 1110 (1200-1¼)	6300-1½ 1270 (1300-1½)	6300-3 1270 (1300-3)	6540-3 1510 (1600-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

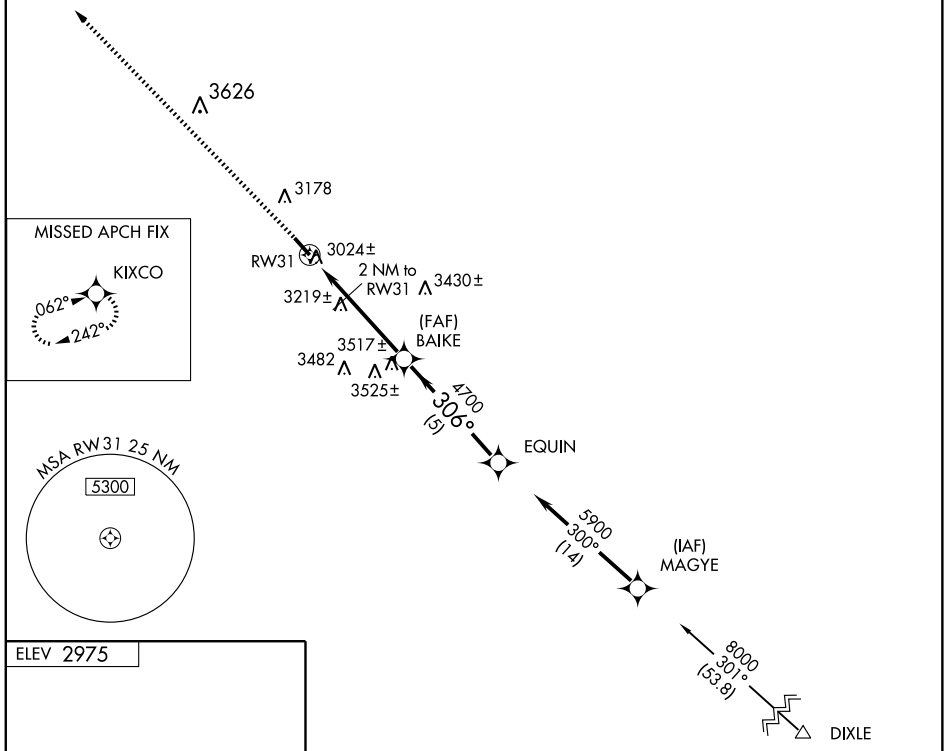
APP CRS	Rwy Idg	4898
306°	TDZE	2975
	Apt Elev	2975

GPS RWY 31
BAKER MUNI (BHK)

T
NA

MISSED APPROACH: Climb to 6000 direct KIXCO WP and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9 L



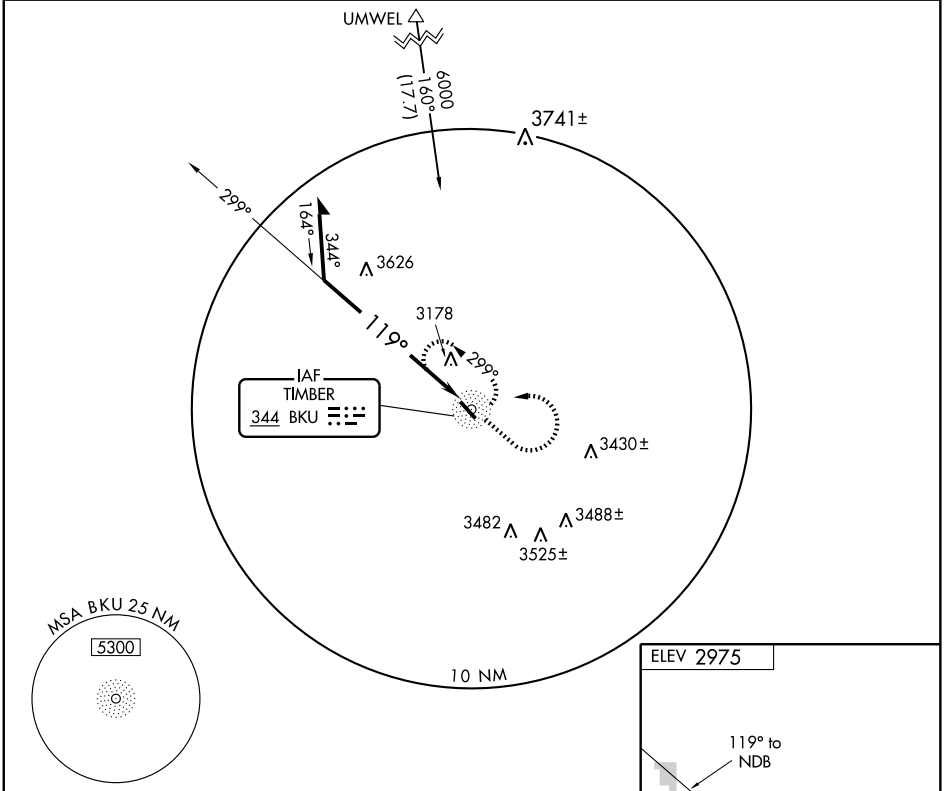
CATEGORY	A	B	C	D
S-31	3500-1	525 (600-1)	3500-1½ 525 (600-1½)	3500-1¾ 525 (600-1¾)
CIRCLING	3560-1	585 (600-1)	3560-1½ 585 (600-1½)	3560-2 585 (600-2)

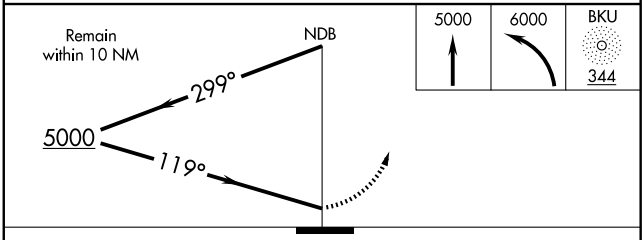
NDB BKU	APP CRS	Rwy Idg	4898
344	119°	TDZE	2974
		Apt Elev	2975

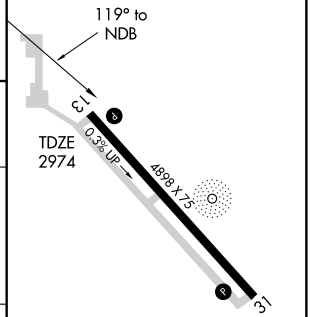
NDB RWY 13
BAKER MUNI (BHK)

MISSED APPROACH: Climb to 5000, then climbing left turn to 6000 direct BKU NDB and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9 L







CATEGORY	A	B	C	D
S-13	3980-1¼ 1006 (1100-1¼)	3980-1½ 1006 (1100-1½)	3980-3	1006 (1100-3)
CIRCLING	3980-1¼ 1005 (1100-1¼)	3980-1½ 1005 (1100-1½)	3980-3	1005 (1100-3)

MIRL Rwy 13-31 L

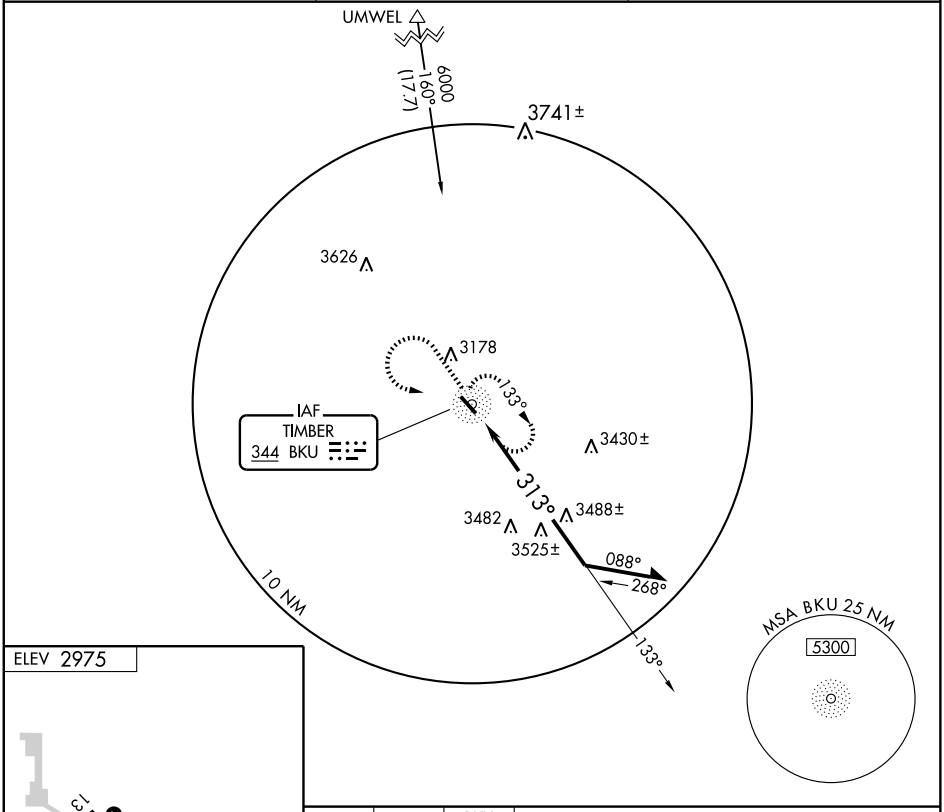
NW-1, 14 JAN 2010 to 11 FEB 2010

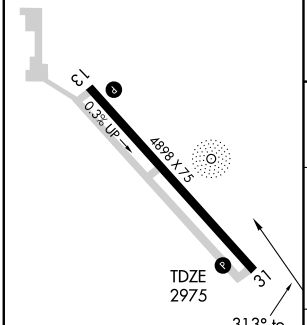
NDB BKU 344	APP CRS 313°	Rwy Idg 4898 TDZE 2975 Apt Elev 2975

NDB RWY 31
BAKER MUNI (BHK)

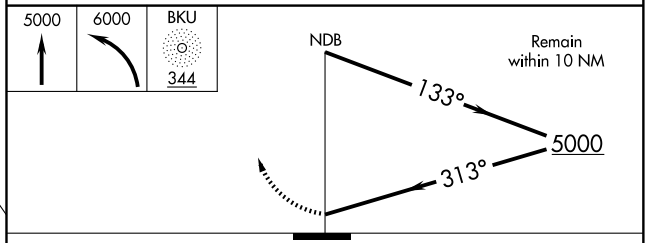
MISSED APPROACH: Climb to 5000, then climbing left turn to 6000 direct BKU NDB and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	126.85 305.2	122.9 L





MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-31	3880-1¼	905 (1000-1¼)	3880-2¾ 905 (1000-2¾)	3880-3 905 (1000-3)
CIRCLING	3880-1¼	905 (1000-1¼)	3880-2¾ 905 (1000-2¾)	3880-3 905 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA

ATIS
126.3
BILLINGS TOWER
127.2 257.8
GND CON
121.9
CLNC DEL
121.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

D — 45°49′N

ELEV 3584
10L
099.3°
0.8% DOWN
FIELD ELEV 3652
10R
099.1°
071.5°
5501 X 75
1.9% UP
ELEV 3534
251.5°
25
3801 X 75
279.1°
28L
1.2% UP
ELEV 3636
ELEV 3607
10518 X 150
1.0% UP
279.3°
ELEV 3488
28R
150 X 150
VAR 12.5°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
EXECUTIVE HANGAR AREA
FIRE STATION
TWR 3703±
TERMINAL
ILS HOLD

RWY 7-25
S14
RWY 10L-28R ☆
S130, D170, ST175,
DT285, DDT 555(DC-10)
DDT710 (B-747)
RWY 10R-28L
S12

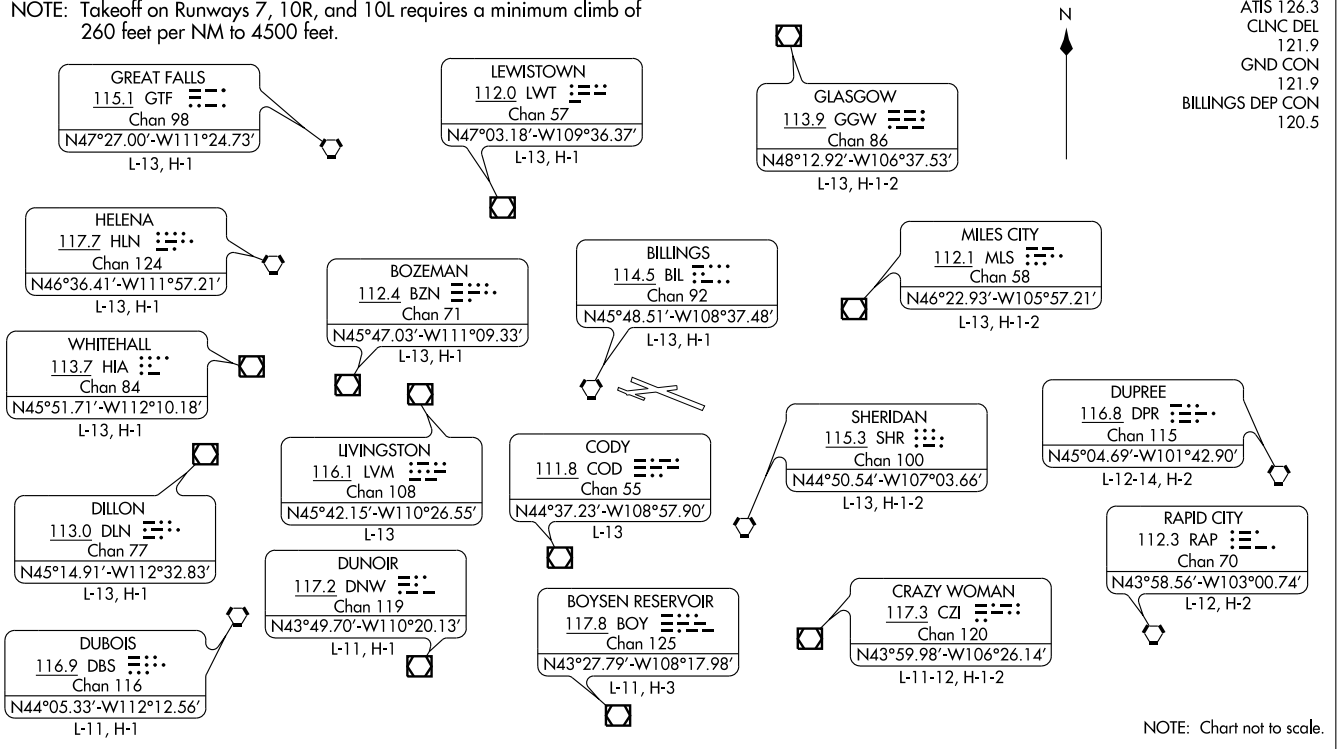
45°48′N

108°33′W
108°32′W
108°31′W

BILLINGS TWO DEPARTURE

NOTE: Takeoff on Runways 7, 10R, and 10L requires a minimum climb of 260 feet per NM to 4500 feet.

ATIS 126.3
CLNC DEL 121.9
GND CON 121.9
BILLINGS DEP CON 120.5



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Fly assigned heading for vectors to assigned fix/route. Maintain 12,000 feet or assigned lower altitude. Expect clearance to filed altitude/flight level within 40 NM of BIL VORTAC.

LOST COMMUNICATIONS: If no transmissions are received for 1 minute after departure, fly last assigned heading until reaching 7000 feet. Proceed direct BIL VORTAC, then via last routing cleared and climb to filed altitude.

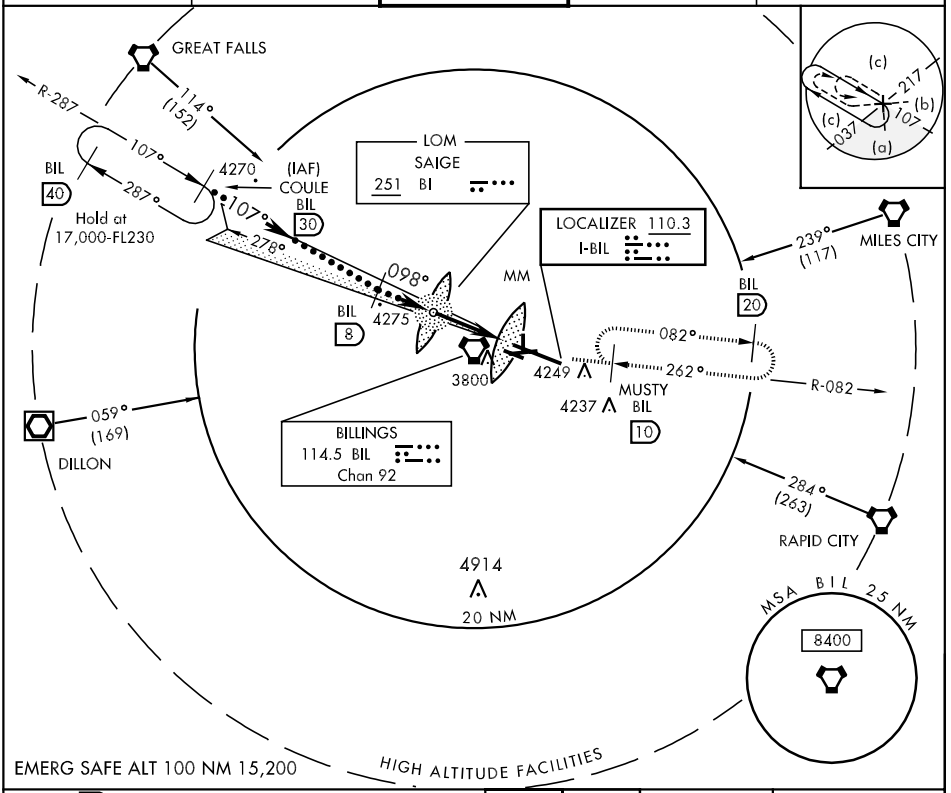
HI-ILS RWY 10L

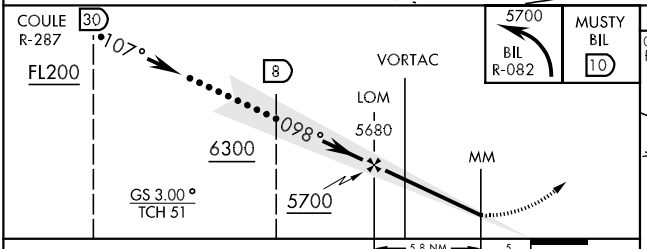
LOCALIZER I-BIL	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-48 [USAF]	BILLINGS LOGAN INTL (KBIL)
110.3	098°	10,518 / 3584 / 3652		

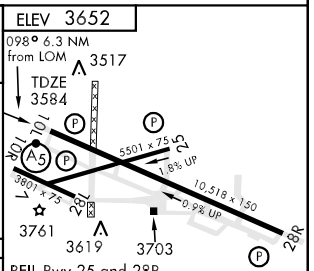
MALSR A5

MISSED APPROACH: Climb to 5700 via BIL R-082 to MUSTY/10 DME and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	C	D	E
S-ILS 10L	3784/24 200 (200-½)		
S-LOC 10L	4100/50 516 (500-1)	4100/60 516 (500-1¼)	
CIRCLING	4180-1½ 528 (600-1½)	4220-2 568 (600-2)	4580-3 928 (1000-3)

FAF to MAP 6.3 NM

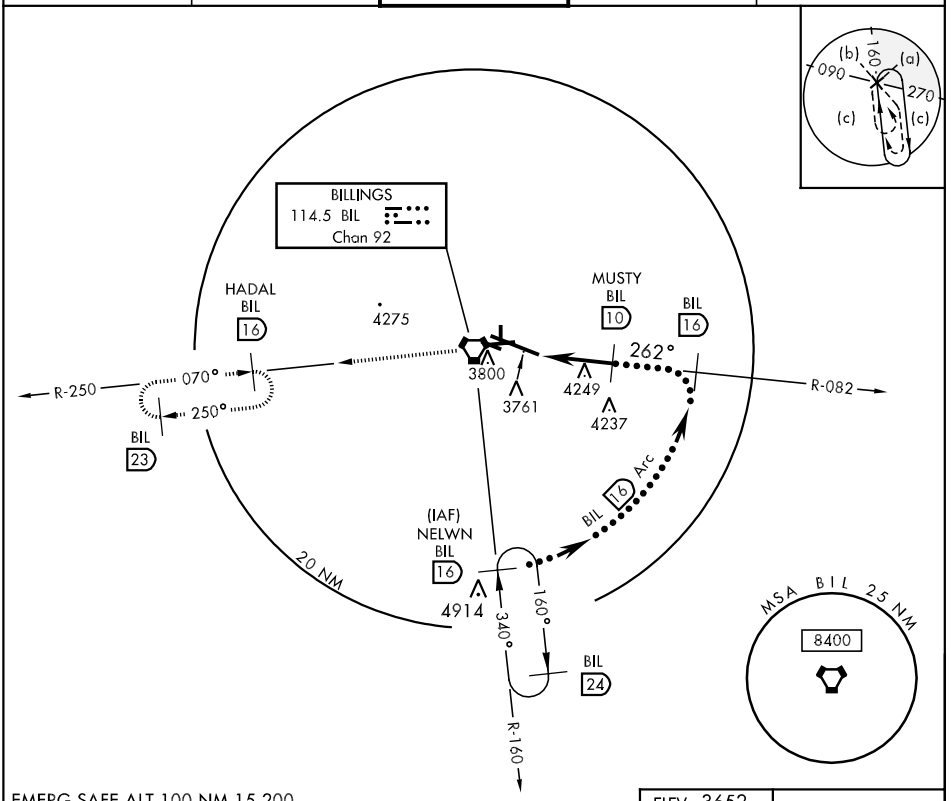
Knots	120	140	160	180	200
Min:Sec	3:09	2:42	2:22	2:06	1:53

HI-VOR/DME or TACAN RWY 28R

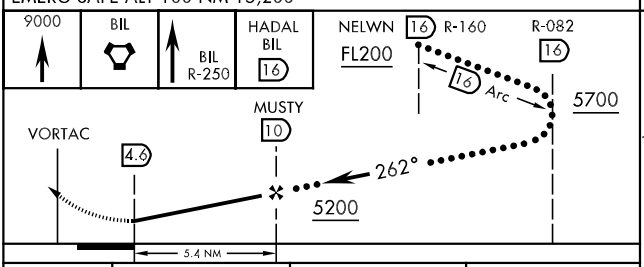
BILLINGS 114.5 Chan 92	APCH CRS 262°	Rwy ldg 10,518 TDZE 3517 Arpt Elev 3652	JAL-48 [USAF]	BILLINGS LOGAN INTL (KBIL)

MISSED APPROACH: Climb to 9000 direct BIL VORTAC then via R-250 to HADAL/16 DME and hold.

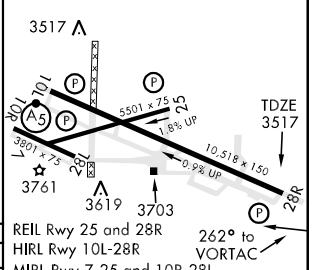
ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9



EMERG SAFE ALT 100 NM 15,200



ELEV 3652



CATEGORY	C	D	E
S-28R	3940-1¼ 423 (300-1¼)		3940-1½ 423 (300-1½)
CIRCLING	4180-1½ 528 (600-1½)	4220-2 568 (600-2)	4580-3 928 (1000-3)

FAF to MAP 5.4 NM

Knots	120	140	160	180	200
Min:Sec	2:42	2:19	2:01	1:48	1:37

LOC/DME I-BMO	APP CRS	Rwy Idg	10518
111.5	278°	TDZE	3517
Chan 52		Apt Elev	3652

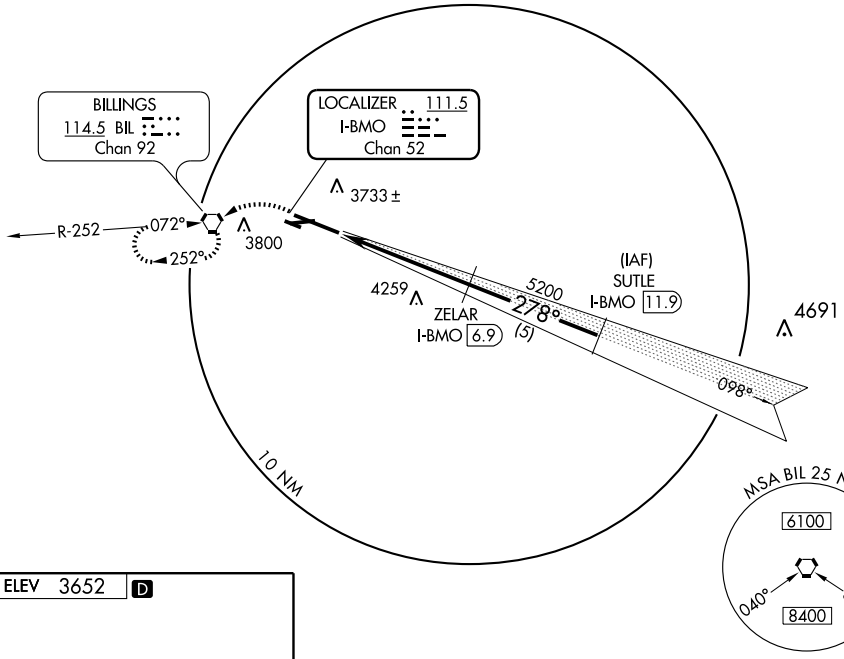
ILS or LOC/DME RWY 28R

BILLINGS LOGAN INTL (BIL)

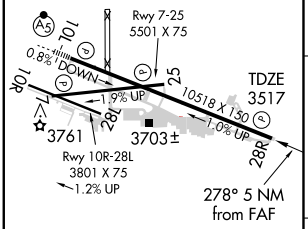
MISSED APPROACH: Climb to 4300 then climbing left turn to 6000 direct BIL VORTAC and hold.

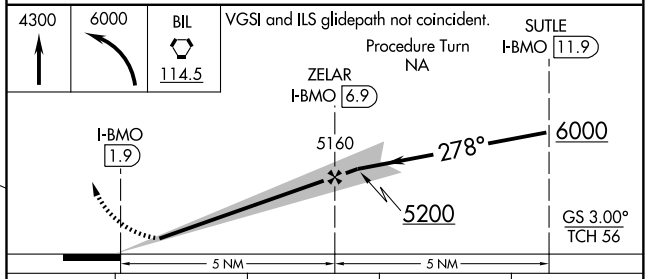
ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

RADAR REQUIRED



ELEV 3652 D





CATEGORY	A	B	C	D
S-ILS 28R	3767-1 250 (200-1)			
S-LOC 28R	4000-1 483 (400-1)		4000-1¼ 483 (400-1¼)	4000-1½ 483 (400-1½)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-BIL	APP CRS	Rwy Idg	10518
110.3	098°	TDZE	3584
		Apt Elev	3652

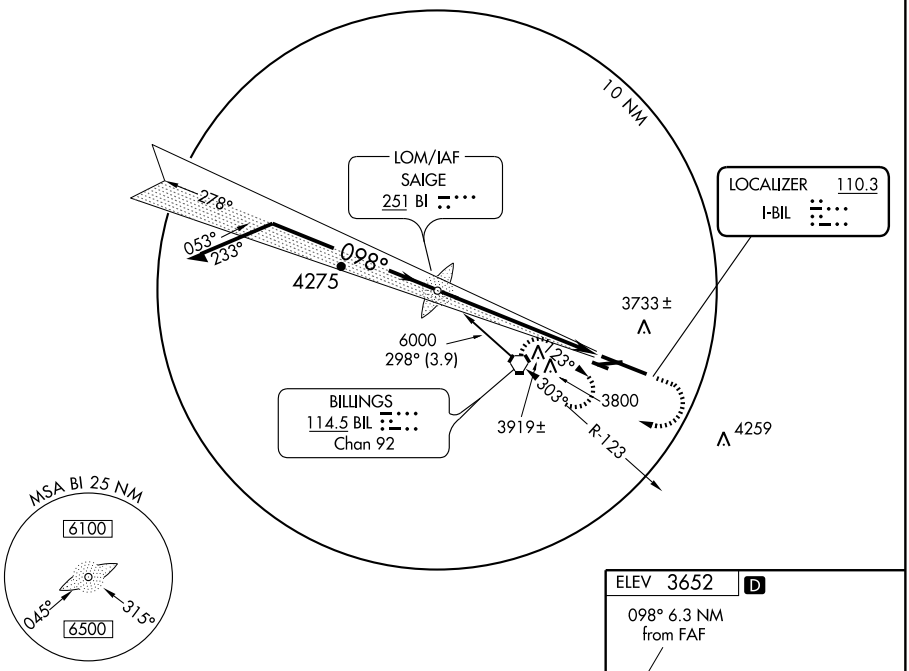
ILS or LOC RWY 10L
BILLINGS LOGAN INTL (BIL)

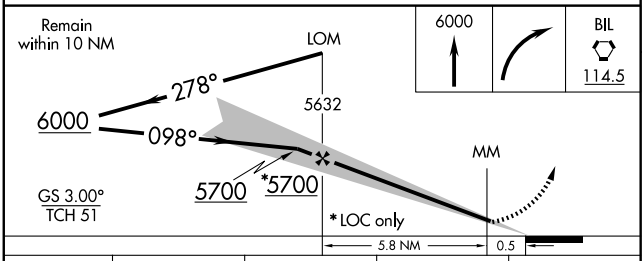
RVR 1800 authorized with the use of FD or AP or HUD to DA.

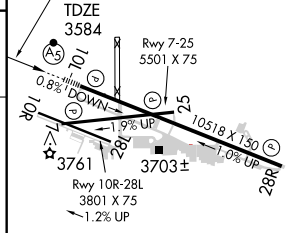
MALSR

MISSED APPROACH: Climb to 6000, then right turn direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
S-ILS 10L	#3784/24 200 (200-½)			
S-LOC 10L	4120/24 536 (500-½)		4120/50 536 (500-1)	4120/60 536 (500-1¼)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM BI	APP CRS	Rwy Idg	10518
251	098°	TDZE	3584
		Apt Elev	3652

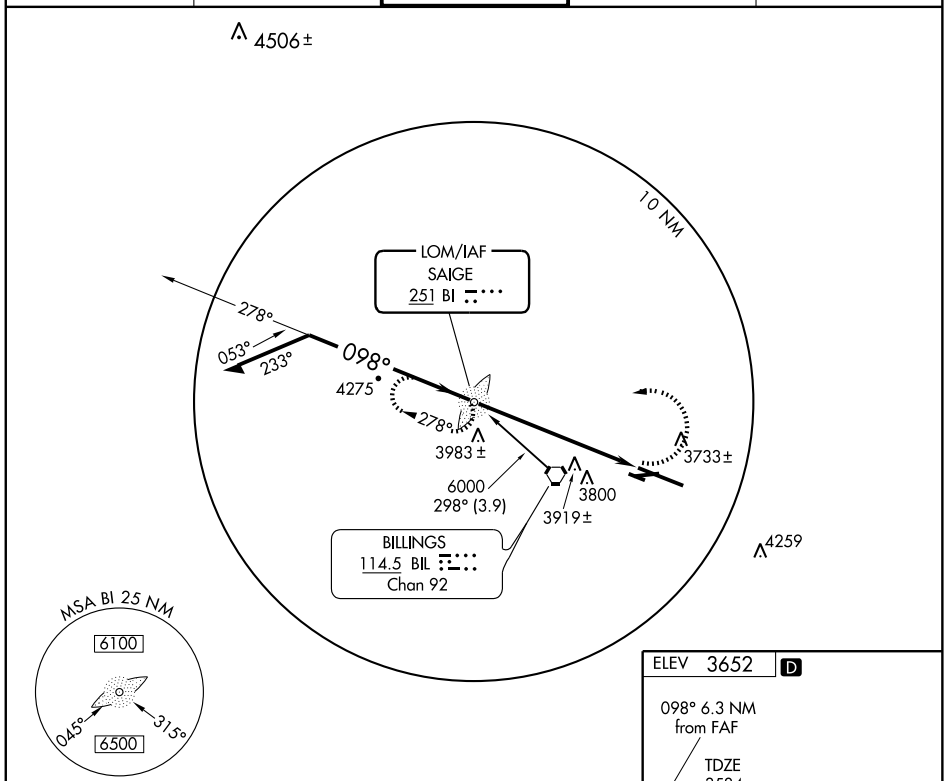
NDB RWY 10L

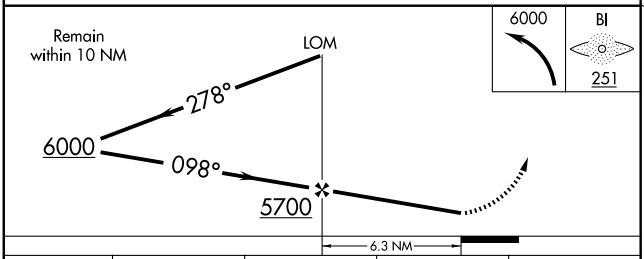
BILLINGS LOGAN INTL (BIL)

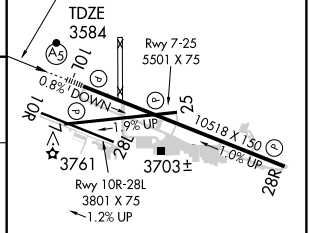
MALSR

MISSED APPROACH: Climbing left turn to 6000 direct Saige LOM and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

CATEGORY	A	B	C	D
S-10L	4300/40 716 (700-¾)		4300-1½ 716 (700-1½)	4300-2 716 (700-2)
CIRCLING	4300-1 648 (700-1)		4300-2 648 (700-2)	4300-2¼ 648 (700-2¼)

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5501
070°	TDZE	3636
	Apt Elev	3652

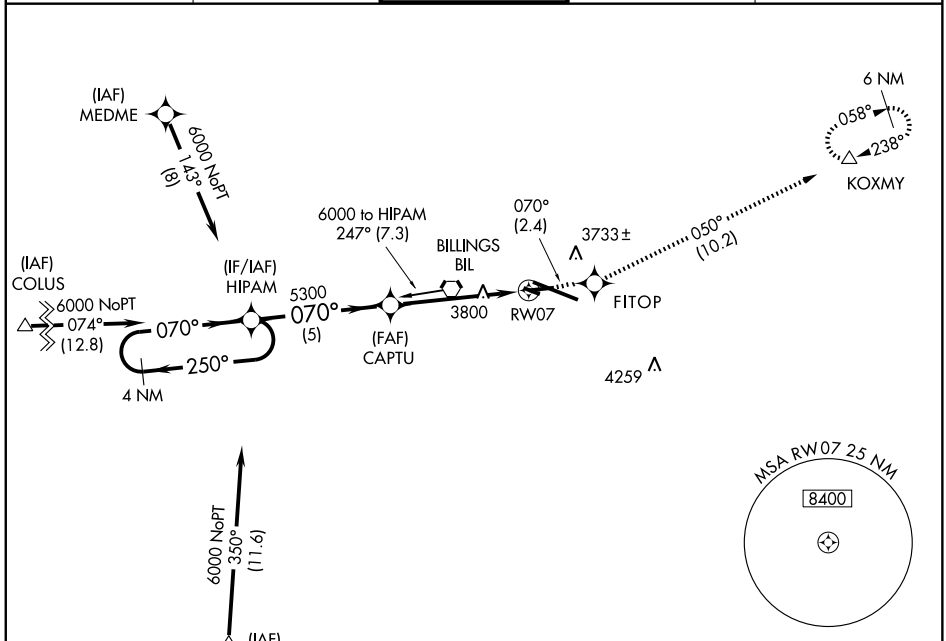
RNAV (GPS) RWY 7

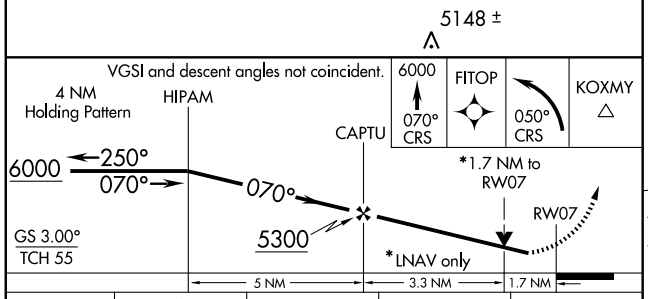
BILLINGS LOGAN INTL (BIL)

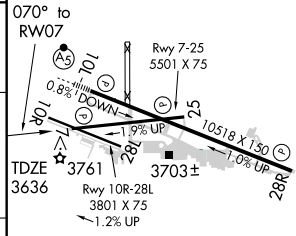
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6000 via 070° course to FITOP, then left turn via 050° course to KOXMY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	4209-2 573 (600-2)			
LNAV MDA	4220-1 584 (600-1)		4220-1½ 584 (600-1½)	4220-1¾ 584 (600-1¾)
CIRCLING	4220-1 568 (600-1)		4220-1½ 568 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 50122 W10A	APP CRS 098°	Rwy Idg 10518 TDZE 3584 Apt Elev 3652

RNAV (GPS) RWY 10L

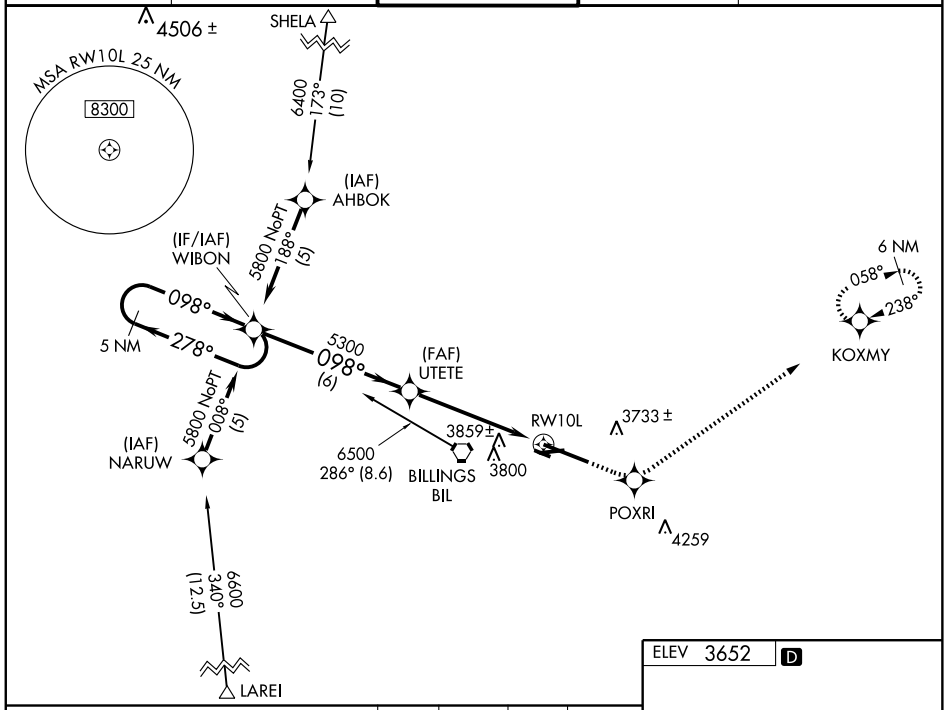
BILLINGS LOGAN INTL (BIL)

Baro-VNAV NA below -22°C (-7°F).
DME/DME RNP- 0.3 NA.
Inoperative table does not apply to LNAV/VNAV.
For inoperative MALSR increase LPV visibility to RVR 6000 all Cats.

MALSR (A5)

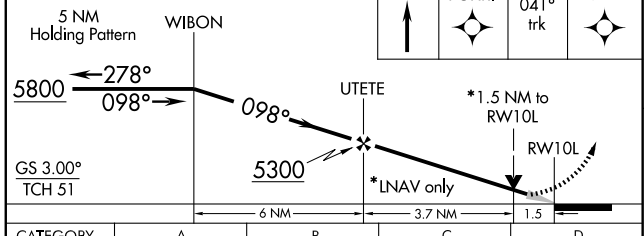
MISSED APPROACH: Climb to 6000 direct POXRI and via 041° track to KOXMY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

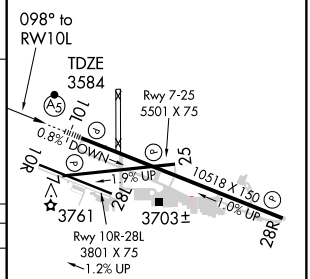


VGSI and RNAV glidepath not coincident.

6000	POXRI	041° trk	KOXMY



ELEV 3652 D



CATEGORY	A	B	C	D
LPV DA	3950/40 366 (300-¾)			
LNAV/VNAV DA	4200-2¼ 616 (600-2¼)			
LNAV MDA	4120/24 536 (500-½)		4120/50 536 (500-1)	4120/60 536 (500-1¼)
CIRCLING	4200-2¼ 548 (600-2¼)			4220-2¼ 568 (600-2¼)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	TDZE	Apt Elev
250°	5501	3586	3652

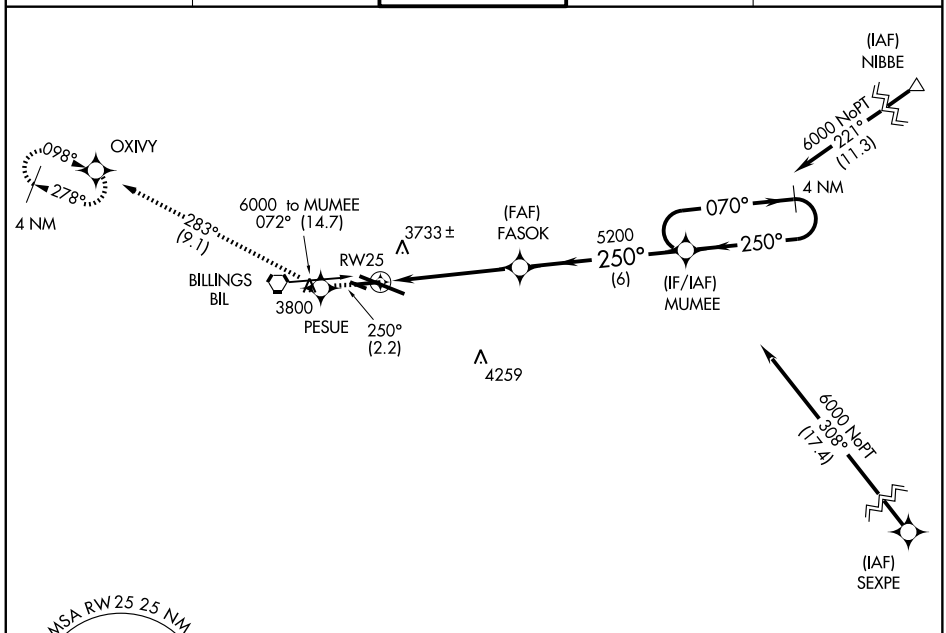
RNAV (GPS) RWY 25

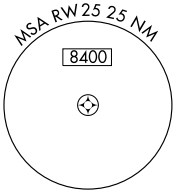
BILLINGS LOGAN INTL (BIL)

DME/DME RNP- 0.3 NA.

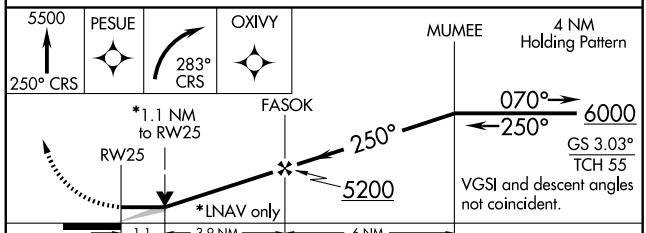
MISSED APPROACH: Climb to 5500 via 250° course to PESUE WP then right turn via 283° course to OXIVY and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9



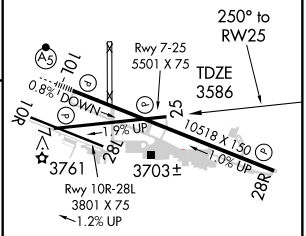


5148±



CATEGORY	A	B	C	D
LNAV MDA	4020-1 434 (400-1)		4020-1¼ 434 (400-1¼)	4020-1½ 434 (400-1½)
CIRCLING	4160-1¼ 508 (600-1¼)	4180-1¼ 528 (600-1¼)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

ELEV 3652 D



REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

BILLINGS, MONTANA

AL-48 (FAA)

WAAS CH 56222 W28A	APP CRS 278°	Rwy Idg 10518 TDZE 3517 Apt Elev 3652

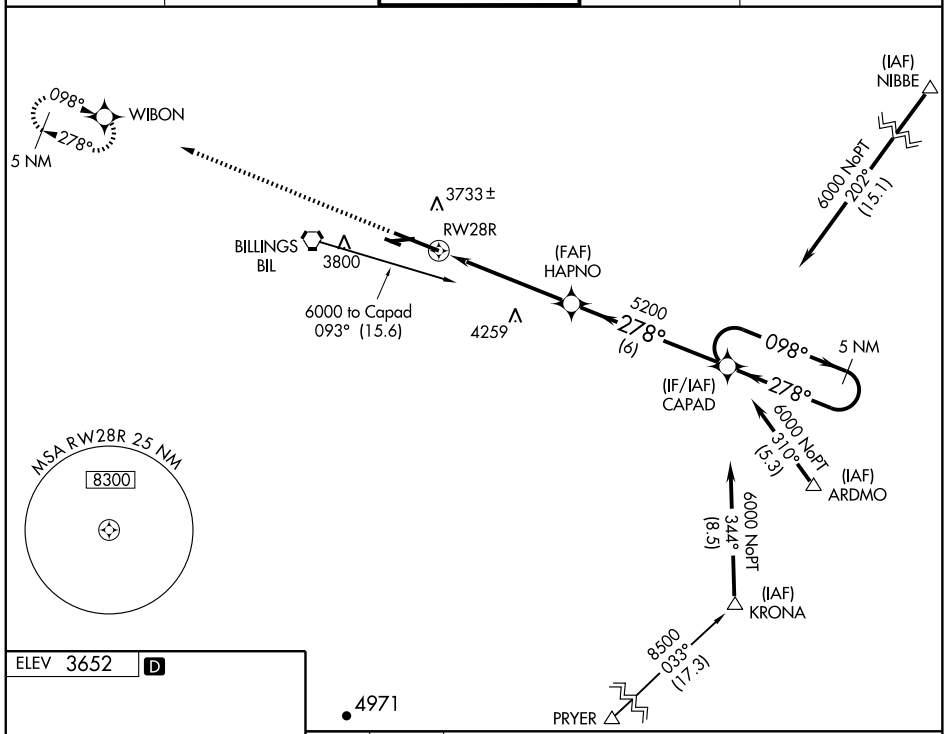
RNAV (GPS) RWY 28R

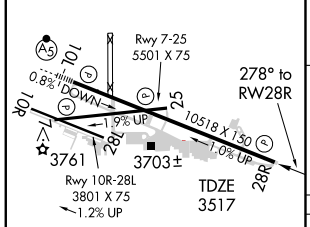
BILLINGS LOGAN INTL (BIL)

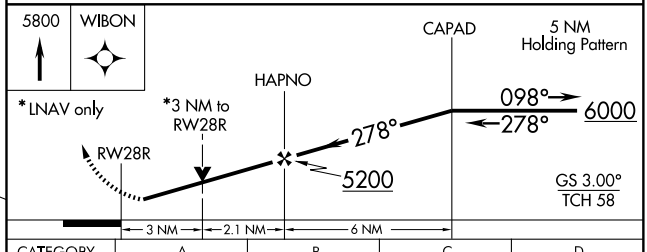
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 41°C (105°F). DME/DME RNP- 0.3 NA

MISSED APPROACH: Climb to 5800 direct WIBON and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
LPV DA	3770-1 253 (200-1)			
LNAV/VNAV DA	3840-1¼ 323 (200-1¼)			
LNAV MDA	4500-1¼ 983 (900-1¼)	4500-1½ 983 (900-1½)	4500-3 983 (900-3)	
CIRCLING	4500-1¼ 848 (900-1¼)	4500-1½ 848 (900-1½)	4500-3 848 (900-3)	

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

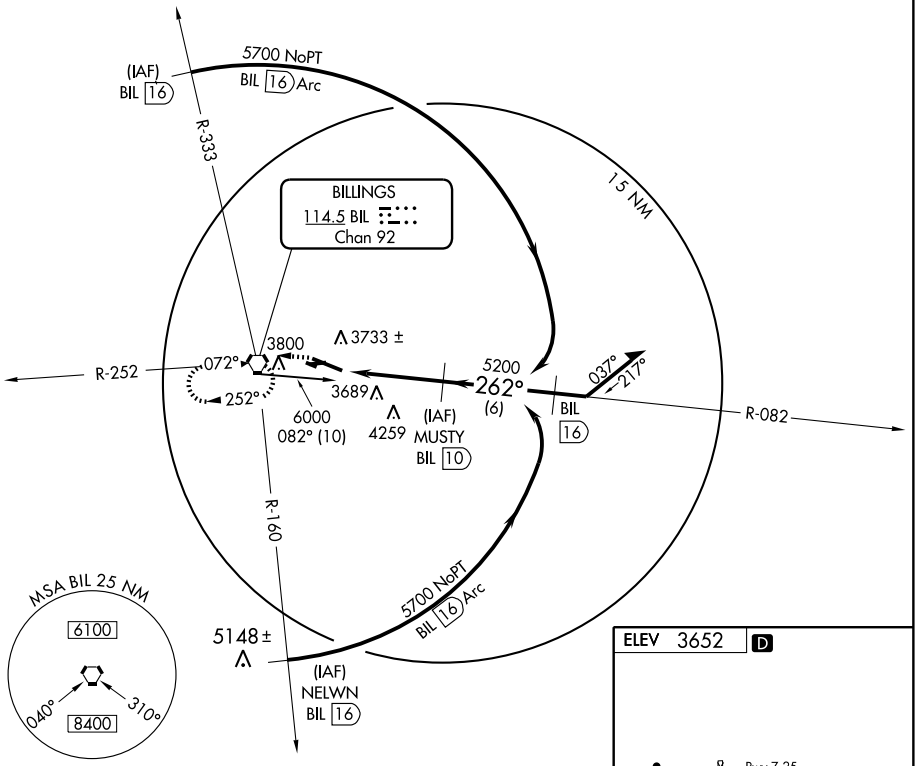
VORTAC BIL 114.5 Chan 92	APP CRS 262°	Rwy Idg 10518 TDZE 3517 Apt Elev 3652

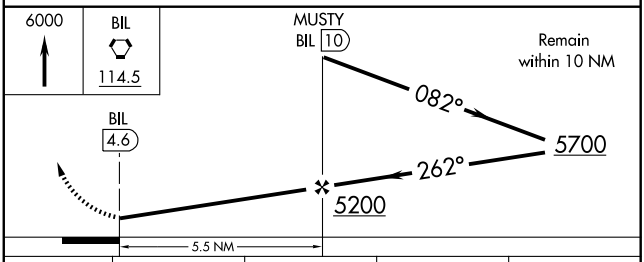
VOR/DME RWY 28R

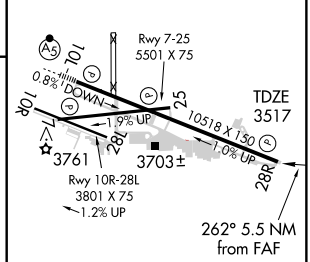
BILLINGS LOGAN INTL (BIL)

MISSED APPROACH: Climb to 6000 direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9







CATEGORY	A	B	C	D
S-28R	4040-1	523 (400-1)	4040-1½ 523 (400-1½)	4040-1¾ 523 (400-1¾)
CIRCLING	4160-1 508 (600-1)	4180-1 528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

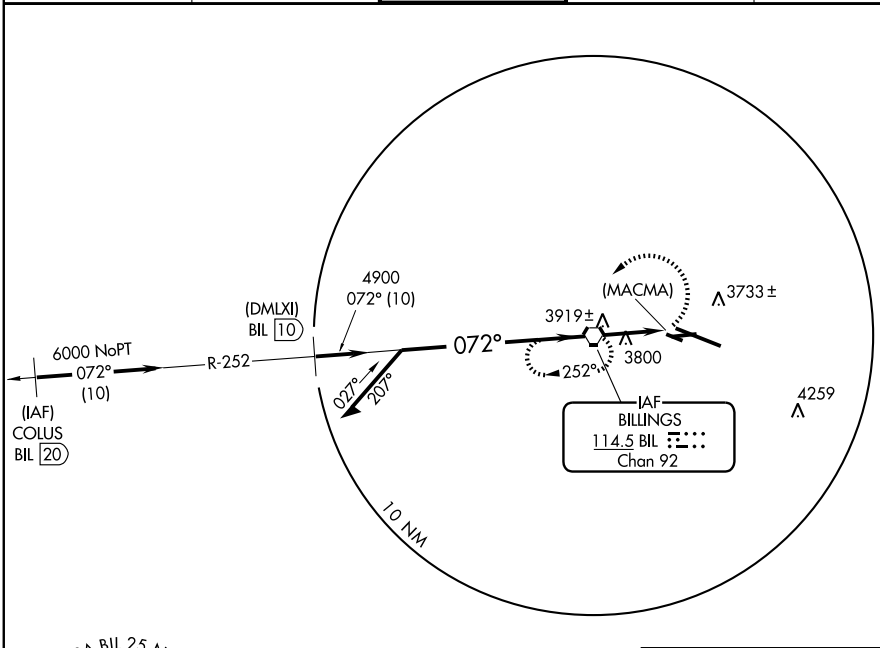
VORTAC BIL 114.5 Chan 92	APP CRS 072°	Rwy Idg N/A TDZE N/A Apt Elev 3652

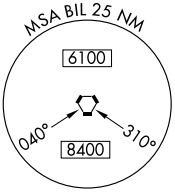
VOR or GPS-A

BILLINGS LOGAN INTL (BIL)

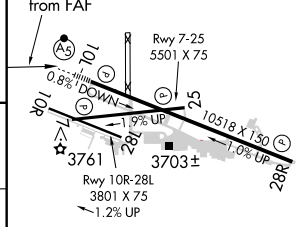
MISSED APPROACH: Climbing left turn to 6000 direct BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

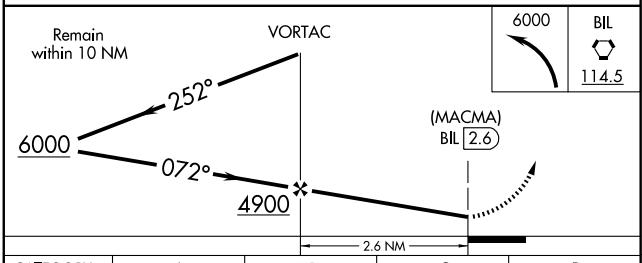




5148±



REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L



CATEGORY	A	B	C	D
CIRCLING	4180-1	528 (600-1)	4180-1½ 528 (600-1½)	4220-2 568 (600-2)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

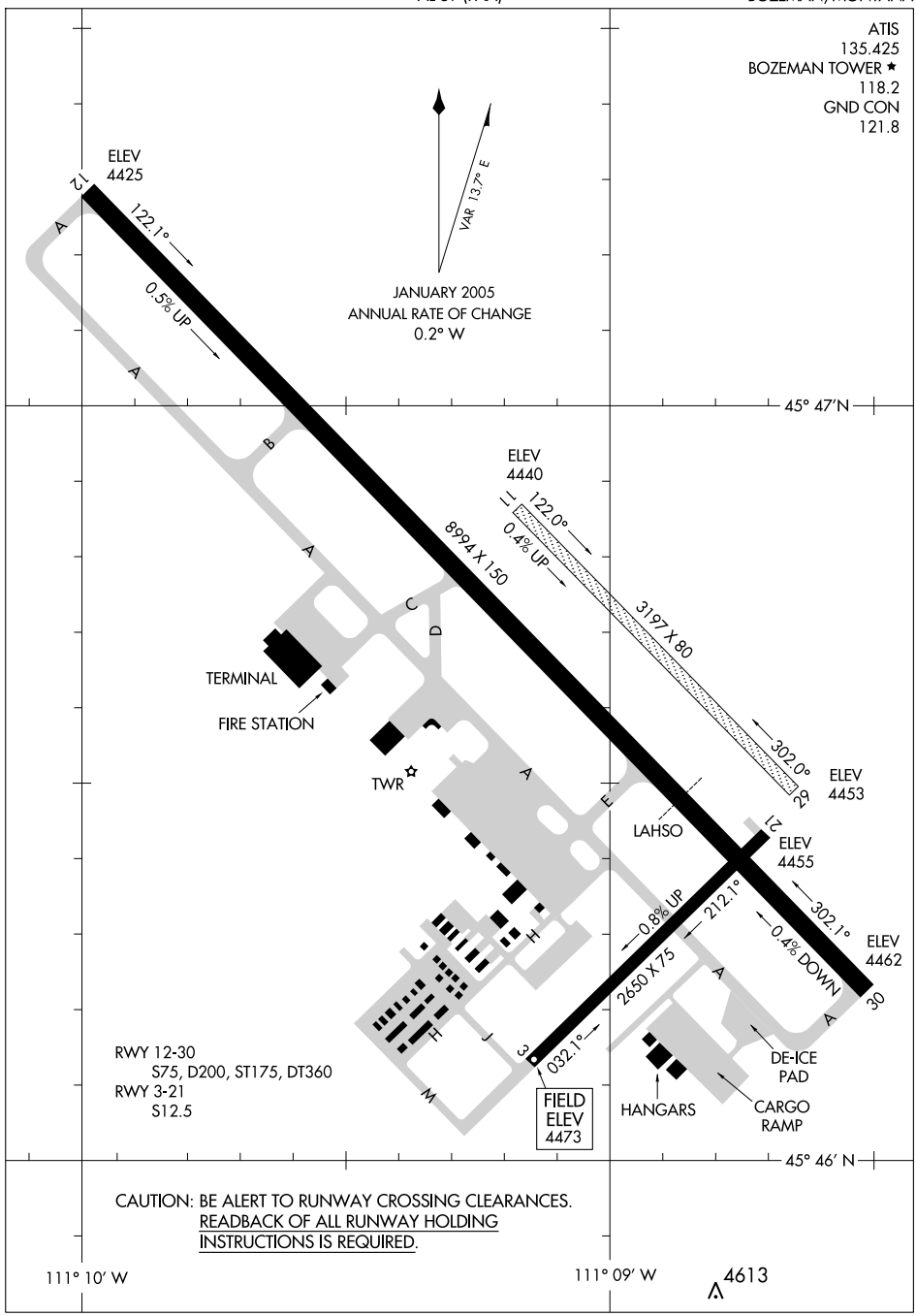
NW-1, 14 JAN 2010 to 11 FEB 2010

09239

AIRPORT DIAGRAM

AL-59 (FAA)

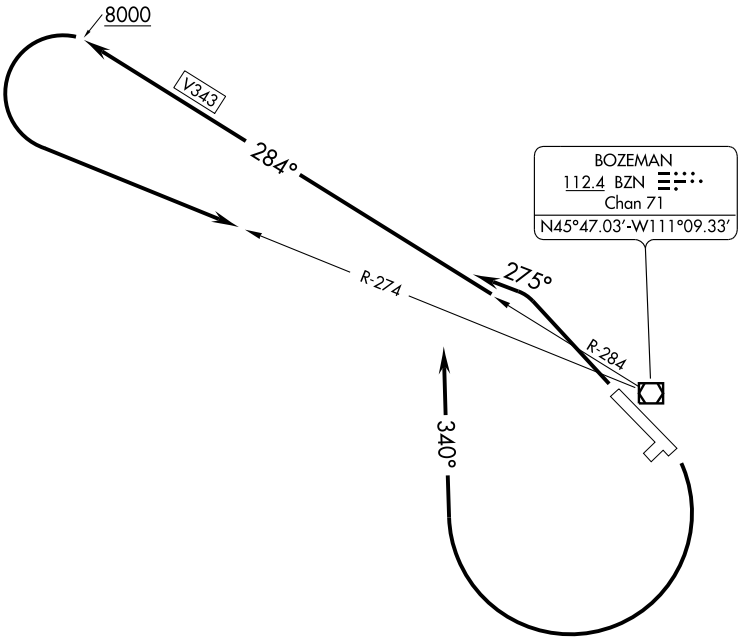
BOZEMAN/GALLATIN FIELD (BZN)
BOZEMAN, MONTANA



NW-1, 14 JAN 2010 to 11 FEB 2010

BOZEMAN ONE DEPARTURE (OBSTACLE)

ATIS 135.425
GND CON
121.8
BOZEMAN TOWER ★
118.2 (CTAF)
SALT LAKE CITY CENTER
132.4 338.3



TAKE-OFF MINIMUMS
Rwy 3, 21: NA - ATC.
Rwy 12, 30: Standard

TAKE-OFF OBSTACLE NOTES
Rwy 30: Pole 636' from DER, 622' left of centerline, 62' AGL/4452' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climbing right turn heading 340° to intercept BZN R-284 outbound to 8000. Aircraft departing westbound via V343 climb on course, all others continue climbing left turn to intercept BZN R-274 to BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

TAKE-OFF RUNWAY 30: Climbing left turn heading 275° to intercept BZN R-284 outbound to 8000. Aircraft departing westbound via V343 climb on course, all others continue climbing left turn to intercept BZN R-274 to BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-BZN	APP CRS	Rwy Idg	8994
109.3	118°	TDZE	4439
		Apt Elev	4474

ILS RWY 12

BOZEMAN/GALLATIN FIELD (BZN)

Increase S-LOC 12 Cat D visibility ¼ mile for inoperative MALSR.

MALSR

MISSED APPROACH: Climb to 5000, then climbing right turn to 8000 direct BZ LOM and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER★	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95

ADF REQUIRED

R-320 298° 7133 6442 (IAF) MENAR 6800 NoPT 118° (8.2) 8300 7300 060°(5.1) FALIA INT HIA 32 5695 BZN 14 Arc R-060 073° 253° 9700 060° (26.9) (IAF) THESE HIA 26.9 LR-306 165° (7.1) 6800 NoPT 118° (6.4) R-284 298° WHITEHALL 113.7 HIA Chan 84 LOM/IAF MANNI 266 BZ BZN 7.6 7300 297°(7.6) BOZEMAN 112.4 BZN Chan 71 4793 10 NM LOCALIZER 109.3 I-BZN 5082 5933± 5884 9159 9650 8880 8471 6180 7615

MSA BZ 25 NM
180°
8800 10800
090° 270°
11200 12100
360°

ELEV 4474

118° 7.1 NM from FAF

TDZE 4439

0.5% UP

8994 X 150

0.4% UP

3197 X 80

0.4% DOWN

2650 X 75

0.7% UP

12 30 21 3

TWR 4609 4613

REIL Rwy 30 L
HIRL Rwy 12-30 L

Remain within 10 NM

LOM BZN 7.6

298° 7300 118° 6779 6800

BZN 0.5

GS 3.00° TCH 53

7.1 NM

5000 8000 BZ 266

FAF to MAP 7.1 NM					
Knots	60	90	120	150	180
Min:Sec	7:06	4:44	3:33	2:50	2:22

CATEGORY	A	B	C	D
S-ILS 12	4650-½ 211 (200-½)			
S-LOC 12	4760-½ 321 (300-½)			4760-¾ 321 (300-¾)
CIRCLING	4940-1 466 (500-1)		4940-1½ 466 (500-1½)	5040-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
298°	TDZE	N/A
	Apt Elev	4474

RNAV (GPS)-A

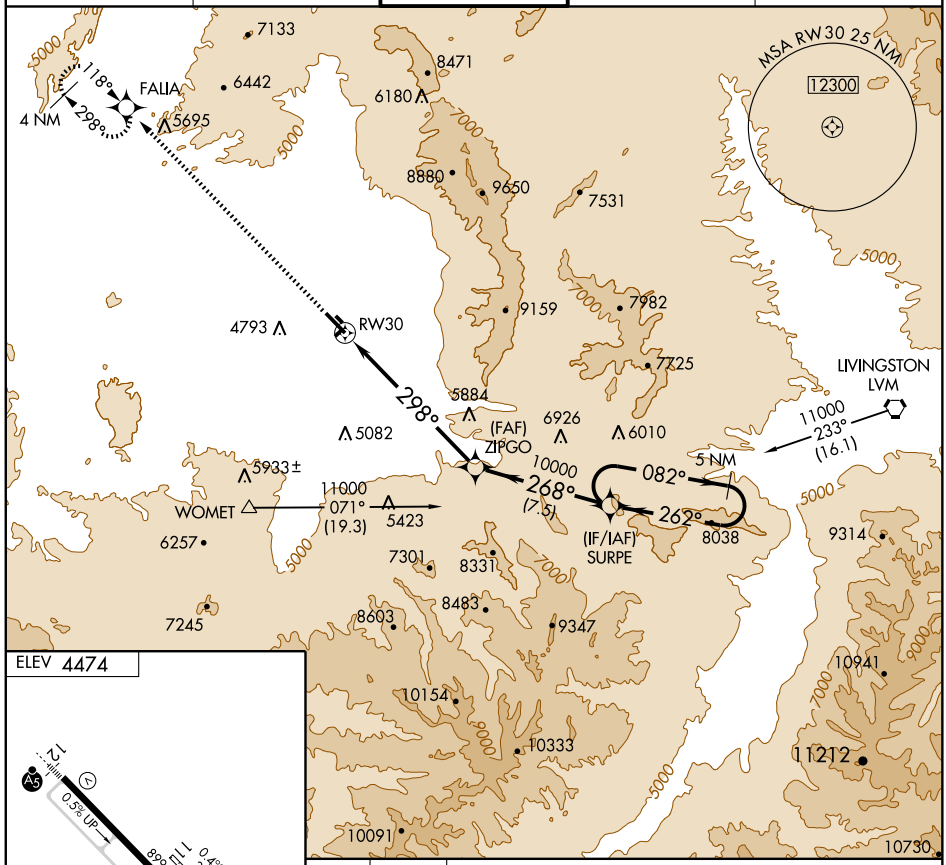
BOZEMAN/GALLATIN FIELD (BZN)

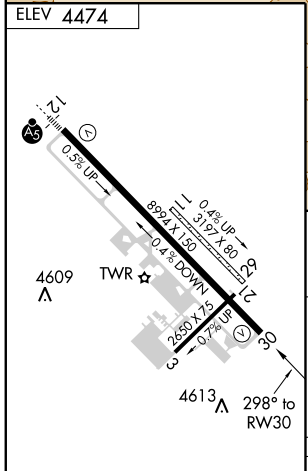
T
NA

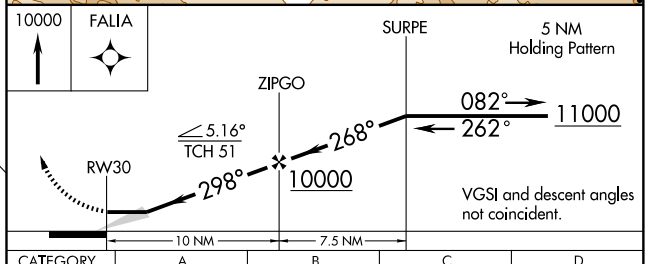
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 10000 direct FALIA WP and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER★	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95







CATEGORY	A	B	C	D
CIRCLING	6380-1¼ 1906 (2000-1¼)	6380-1½ 1906 (2000-1½)	6380-3 1906 (2000-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME BZN 112.4 Chan 71	APP CRS 109°	Rwy Idg 8994 TDZE 4439 Apt Elev 4474

VOR/DME or GPS RWY 12

BOZEMAN/ GALLATIN FIELD (BZN)

MALSR

MISSED APPROACH: Climb to 5300, then a climbing right turn to 9200 via heading 350° to intercept BZN R-320, then via BZN R-320 to MENAR Int and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER★	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95

8300 to BZN 14 DME 064° (2.3) and 109° (3.3)

R-289

R-060

9700 060° (26.9)

(IAF) THESE HIA 26.9

R-284

(DMMCL)

8300 BZN 14 ARC

6442

5695

(IAF) (NURHE)

140° 320°

MENAR BZN 13.4

7133

7615

8471

6180

8880

9650

9159

5884

5082

5933±

R-320

(DMJLG) BZN 14

7100 109°(4)

5900 109° (A)

(CFKSH) BZN 10

(EHUTU) BZN 6

4793

4584±

(MADSE)

10 NM

WHITEHALL 113.7 HIA Chan 84

BOZEMAN 112.4 BZN Chan 71

MSA BZN 25 NM

170°

9600 10800

080° 260°

12100

ELEV 4474

109° 5.5 NM from FAF

TDZE 4439

TWR

4609

4613

0.5% UP

0.4% UP

0.4% DOWN

0.7% UP

8994 X 150

7119 X 80

2650 X 75

12 30 21 3

REIL Rwy 30 L

HIRL Rwy 12-30 L

5300	9200 350°	BZN R-320 112.4	MENAR △

(DMJLG) BZN 14 — 8300 — (CFKSH) BZN 10 — 109° — 7100 — (EHUTU) BZN 6 — 5900 — (MADSE) BZN 1 VOR/DME

Procedure Turn NA

4 NM 4 NM 5 NM 0.5

CATEGORY	A	B	C	D
S-12	4900-½ 461 (500-½)		4900-¾ 461 (500-¾)	4900-1 461 (500-1)
CIRCLING	4940-1 466 (500-1)		4940-1½ 466 (500-1½)	5040-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME BZN	APP CRS	Rwy Idg	8994
112.4	101°	TDZE	4439
Chan 71		Apt Elev	4474

VOR RWY 12

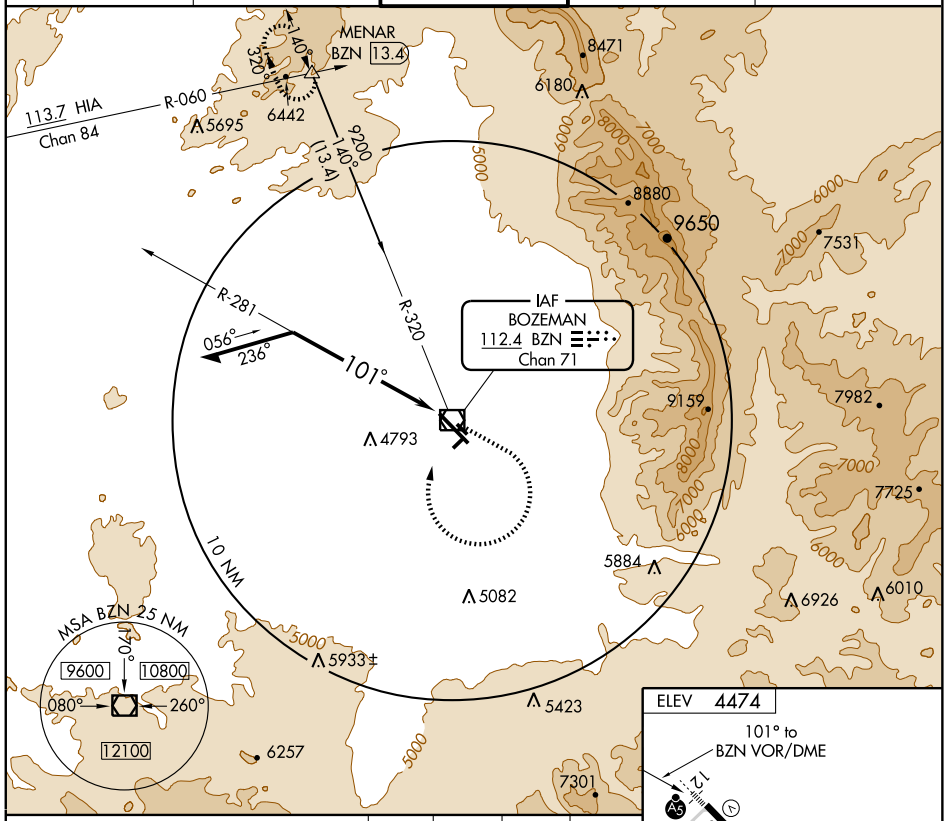
BOZEMAN/GALLATIN FIELD (BZN)

T A Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 5300, then climbing right turn to 9200 via heading 350° to intercept BZN R-320, then via BZN R-320 to MENAR Int and hold.

ATIS	SALT LAKE CENTER	BOZEMAN TOWER*	GND CON	UNICOM
135.425	132.4 338.3	118.2 (CTAF) L	121.8	122.95



Remain within 10 NM

* VOR/DME

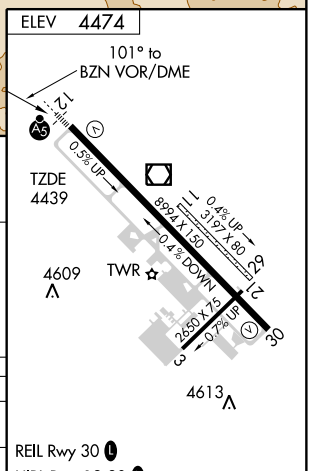
281°

6200

101°

5300	9200	BZN	MENAR
	350°	R-320	
		112.4	

*Maintain 7000 or above until established outbound for procedure turn.



REIL Rwy 30 L

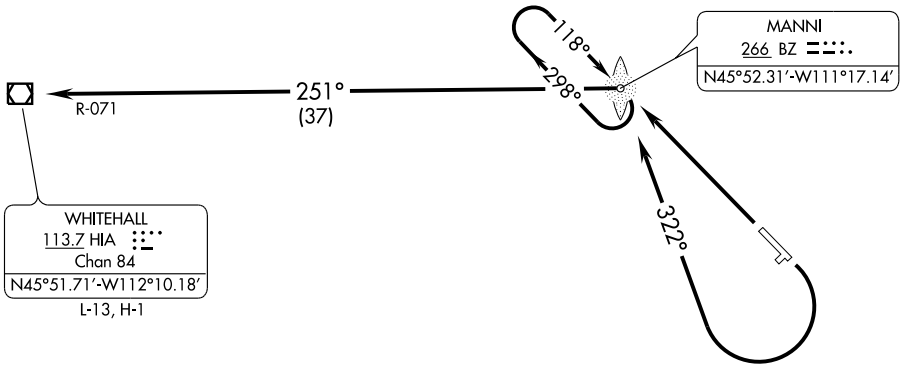
HIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-12	5240-1 801 (800-1)	5240-1¼ 801 (800-1¼)	5240-2¼ 801 (800-2¼)	5240-2½ 801 (800-2½)
CIRCLING	5240-1 766 (800-1)	5240-1¼ 766 (800-1¼)	5240-2¼ 766 (800-2¼)	5240-2½ 766 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

WHITEHALL ONE DEPARTURE

ATIS 135.425
GND CON
121.8
BOZEMAN TOWER ★
118.2 (CTAF)
SALT LAKE CITY CENTER
132.4 338.3



NOTE: ADF REQUIRED

TAKE-OFF MINIMUMS
Rwy 3, 21: NA - ATC.
Rwy 12: Standard
Rwy 30: Standard with a minimum climb of 294' per NM to 6500.

TAKE-OFF OBSTACLE NOTES
Rwy 30: Pole 636' from DER, 622' left of centerline, 62' AGL/4452' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climbing right turn to intercept 322° course to MANNI LOM. Climb in MANNI LOM holding pattern to at or above 8500, then intercept HIA R-071 to HIA VORTAC, cross HIA VORTAC at or above MCA or MEA for route of flight.

TAKE-OFF RUNWAY 30: Climbing left turn direct MANNI LOM. Climb in MANNI LOM holding pattern to at or above 8500, then intercept HIA R-071 to HIA VORTAC, cross HIA VORTAC at or above MCA or MEA for route of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BEY	APP CRS	Rwy Idg	9001
110.9	151°	TDZE	5523
Chan 46		Apt Elev	5550

ILS Y RWY 15

BUTTE/ BERT MOONEY (BTM)

Circling NA northeast of Rwy 15-33.
When glideslope not used, use LOC/DME RWY 15 procedure.
Circling requires descent on glideslope to MDA.
Autopilot coupled approach NA.

MISSED APPROACH: Climb to 7300 then climbing right turn to 9100 via CPN VOR/DME R-113 to CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L

DME REQUIRED

MSA CPN 25 NM
165°
10100
275°
12000
10 NM
331°
151°
1 min
(IAF) NIYID
CPN 17
EVVER
CPN 22.5
11500
207°
(5.5)
10000 NoPT
207°
(6.1)
(IF/IAF) MAGIC INT
I-BEY 13.9
7860
9800
151° (1)
7780
KEVTE
I-BEY 12.8
8000
151°
(3.1)
R-027
YADUL
I-BEY 9.7
7265
7900
(1.8)
HUBDU
I-BEY 7.9
7000
7500
(1.1)
GEYGE
I-BEY 6.9
7765
7100
(1.1)
WELDU
I-BEY 5.8
6250
8462
8625
8560
8225
6248
6345
5755
R-346
166°
346°
10000
027°
(10.9)
COPPERTOWN
111.6 CPN
Chan 53
7766
R-113
LOCALIZER 110.9
I-BEY
Chan 46
WHITEHALL
113.7 HIA
Chan 84
10900 to MAGIC
300°
(24.6)
8597
8460
8752
8819
7000
8000

ELEV 5550

TDZE 5523
15
33
0.6% UP
9001 X 150
5100 X 75
5573 ±
5590
29

One Minute Holding Pattern
MAGIC INT I-BEY 13.9
KEVTE I-BEY 12.8
YADUL I-BEY 9.7
HUBDU I-BEY 7.9
GEYGE I-BEY 6.9
WELDU I-BEY 5.8
10000
331°
151°
9800
8600
7900
7500
7100
GS 3.50°
TCH 55
1 NM 3.1 NM 1.8 1.1 1.1 4.1 NM
7300
9100
CPN R-113
CPN 111.6

CATEGORY	A	B	C	D
S-ILS 15	6711-4 1188 (1200-4)			NA
CIRCLING	6720-4 1170 (1200-4)			NA

REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BEY	APP CRS	Rwy Idg	9001
110.9	151°	TDZE	5523
Chan 46		Apt Elev	5550

LOC/DME RWY 15

BUTTE/ BERT MOONEY (BTM)

Circling not authorized NE of Rwy 15-33.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 9200 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L

Identify ZIPPR INT with CPN R-038 and HIA R-297 prior to procedure turn; MRA HIA R-297 at ZIPPR 11000 feet.

MSA CPN 25 NM
165°
10100
275°
12000

10 NM
331°
106°
286°
151°
R-346
166°
346°
R-038
R-297

GUYEC
I-BEY 14
(IAF)
ZIPPR INT
I-BEY 11.7
11000
038°
(9.9)
VIVVU
I-BEY 7.8
OM

COPPERTOWN
111.6 CPN
Chan 53

WHITEHALL
113.7 HIA
Chan 84

LOCALIZER 110.9
I-BEY
Chan 46

11000
297°
(22.8)

8597 8752 8460 7860 7780 8819 7265 6924± 6538± 6250 7765 8625 8560 8462 7766 6248 6345 8225 5755 7433

ELEV 5550
151° 10 NM from FAF
TDZE 5523
0.6% UP
9001 X 150
5100 X 75
5573±
5590
15
29
33

Remain within 10 NM
ZIPPR INT
I-BEY 11.7
331°
GUYEC
I-BEY 14
151°
10000
9600
9200
3.43°
TCH 55
VIVVU
I-BEY 7.8
I-BEY
5.1
I-BEY
1.7
7780
2.3 NM
3.9 NM
2.7 NM
3.3 NM
9200
CPN
111.6

CATEGORY	A	B	C	D
S-LOC 15	6800-1¼ 1277 (1300-1¼)	6800-1½ 1277 (1300-1½)	6800-3	1277 (1300-3)
CIRCLING	6800-1¼ 1250 (1300-1¼)	6800-1½ 1250 (1300-1½)	6800-3	1250 (1300-3)

REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9001
136°	TDZE	5523
	Apt Elev	5550

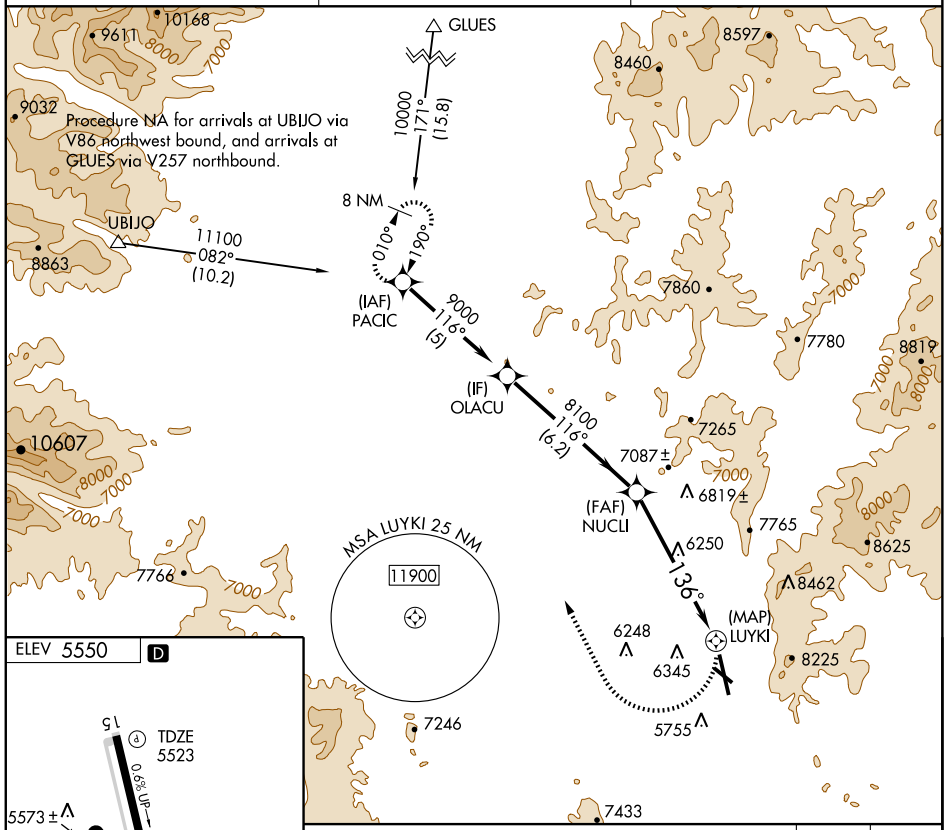
RNAV (GPS) Y RWY 15

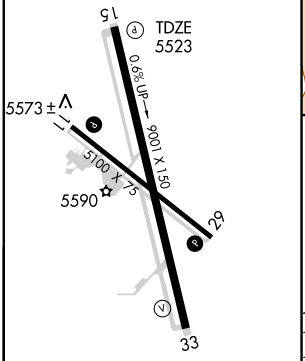
BUTTE/ BERT MOONEY (BTM)

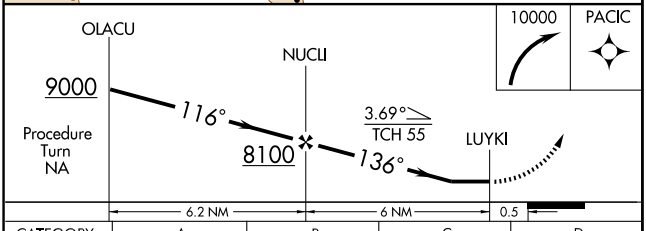
Circling NA northeast of Rwy 15-33.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 10000 direct PACIC and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7040-1¼ 1517 (1500-1¼)	7040-1½ 1517 (1500-1½)	7040-3 1517 (1500-3)	NA
CIRCLING	7040-1¼ 1490 (1500-1¼)	7040-1½ 1490 (1500-1½)	7040-3 1490 (1500-3)	

REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9001
CH 50599	151°	TDZE	5523
W15A		Apt Elev	5550

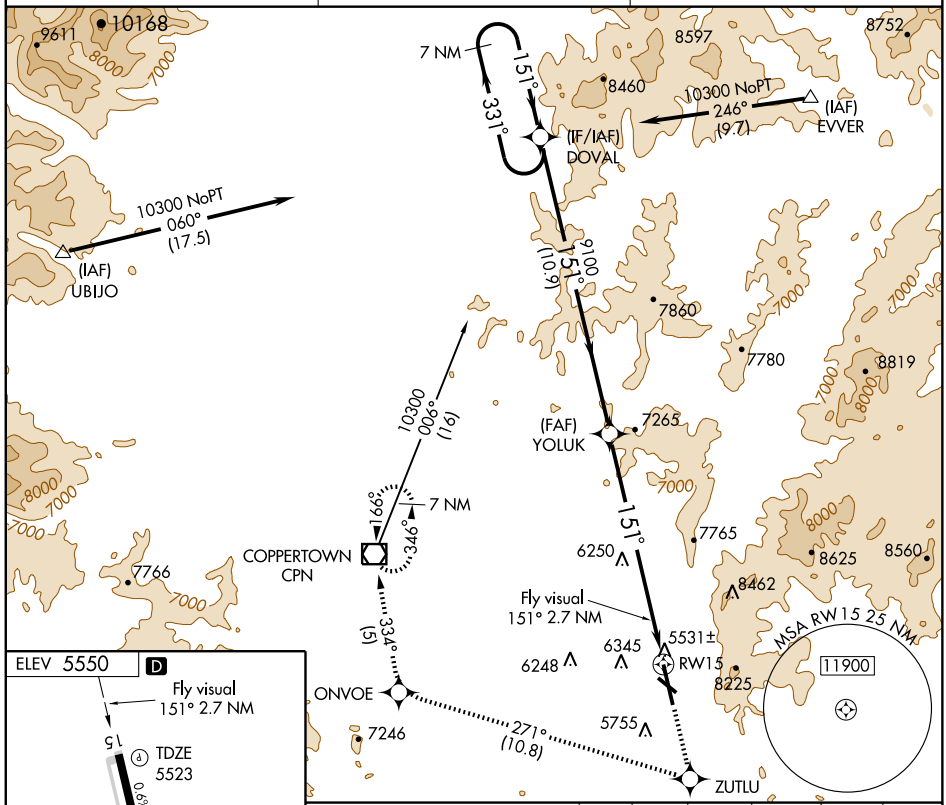
RNAV (GPS) Z RWY 15

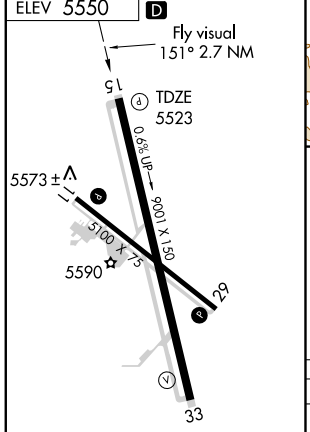
BUTTE/BERT MOONEY (BTM)

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, procedure NA.

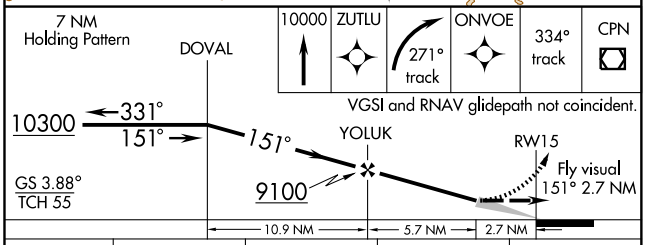
MISSED APPROACH: Climb to 10000 direct ZUTLU and right turn via 271° track to ONVOE and via 334° track to CPN VOR/DME and hold, continue climb-in-hold to 10000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L





REIL Rwys 11, 15 and 29 L
MIRL Rwys 11-29 and 15-33 L



CATEGORY	A	B	C	D
LPV DA	6660-2	1137 (1200-2)	NA	
LNAV/VNAV DA	NA			
LNAV MDA	NA			
CIRCLING	NA			

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME HIA	APP CRS	Rwy Idg	N/A
113.7	272°	TDZE	N/A
Chan 84		Apt Elev	5545

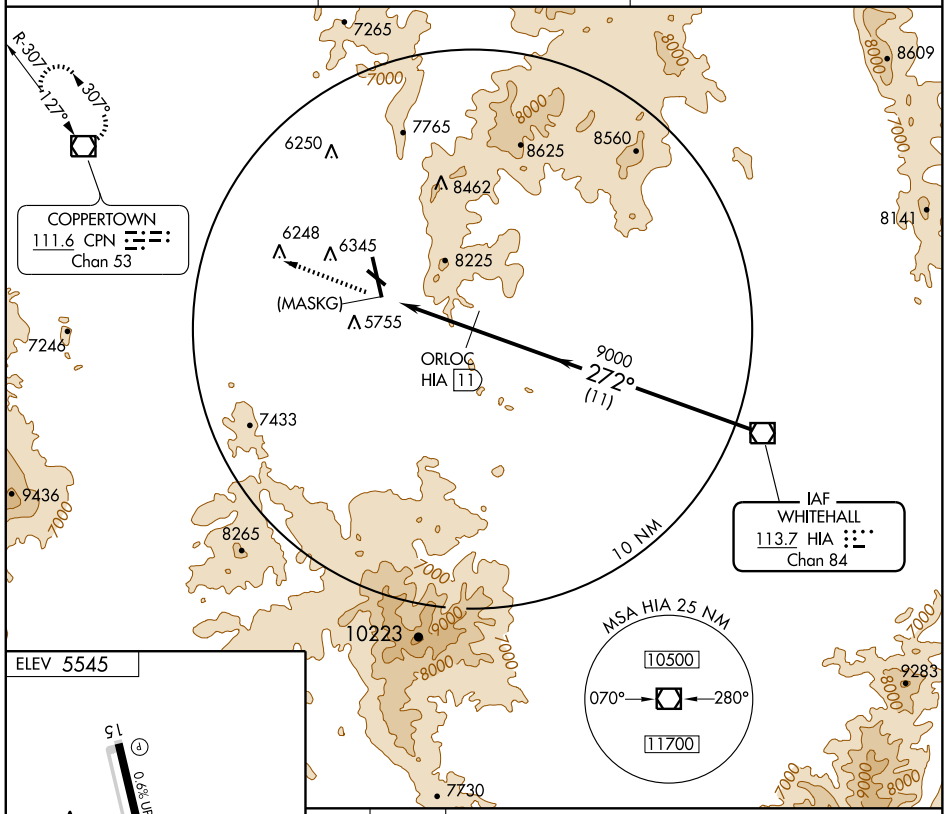
VOR/DME or GPS-A

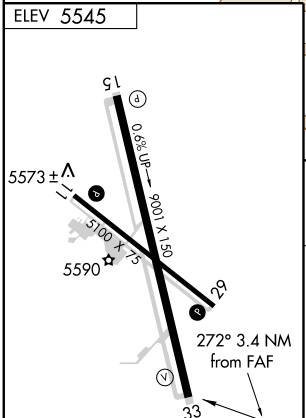
BUTTE/ BERT MOONEY (BTM)

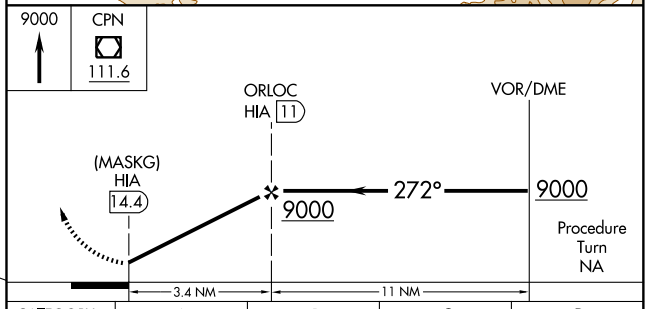
Circling NA northeast of Rwy 15-33.

MISSED APPROACH: Climb to 9000 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	8540-1¼ 2995 (3000-1¼)	8540-1½ 2995 (3000-1½)	8540-3 2995 (3000-3)	

REIL Rwys 11, 15, and 29 L
MIRL Rwys 11-29 and 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME CPN	APP CRS	Rwy Idg	N/A
111.6	097°	TDZE	N/A
Chan 53		Apt Elev	5545

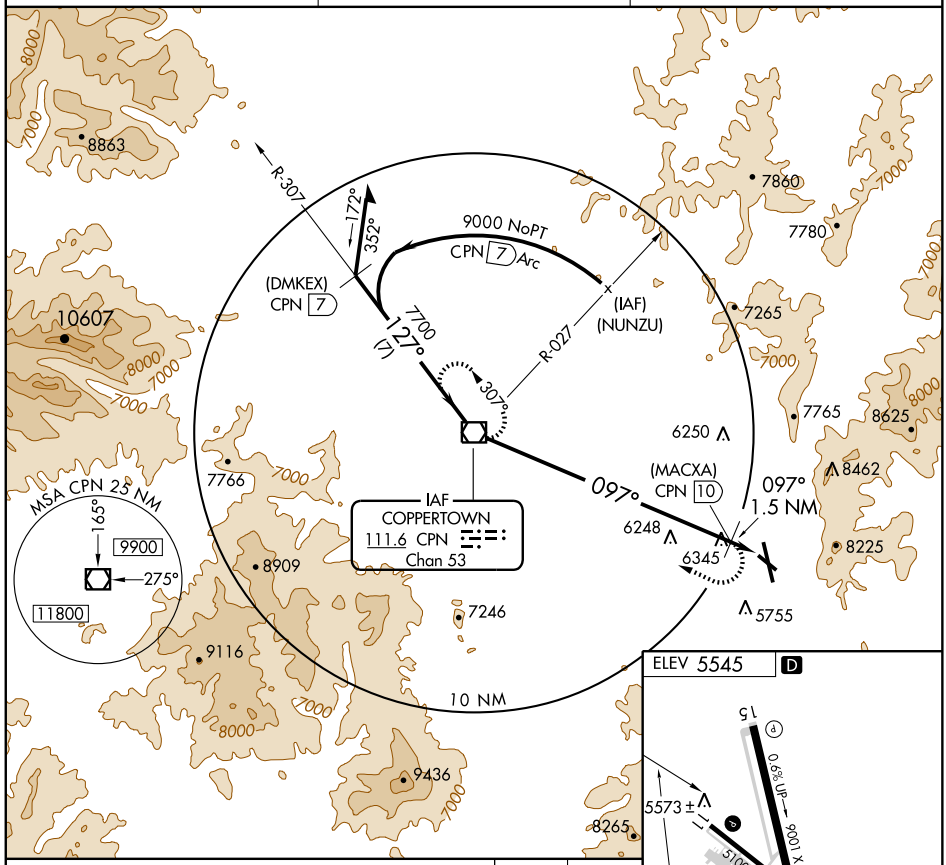
VOR or GPS-B

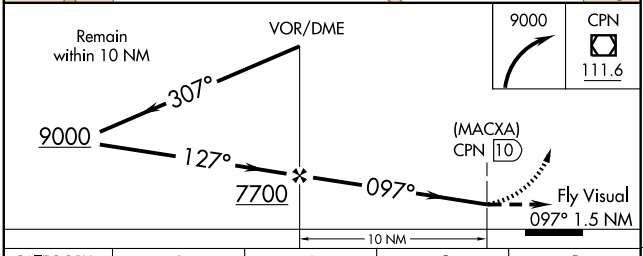
BUTTE/BERT MOONEY (BTM)

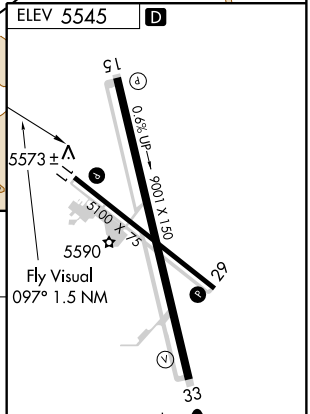
Circling not authorized NE of Rwy 15-33.

MISSED APPROACH: Climbing right turn to 9000 direct CPN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6900-1½ 1355 (1400-1½)		6900-3 1355 (1400-3)	

FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB CII 269	APP CRS 226°	Rwy Idg 3700 TDZE 3940 Apt Elev 3949

NDB or GPS RWY 23
CHOTEAU (CII)

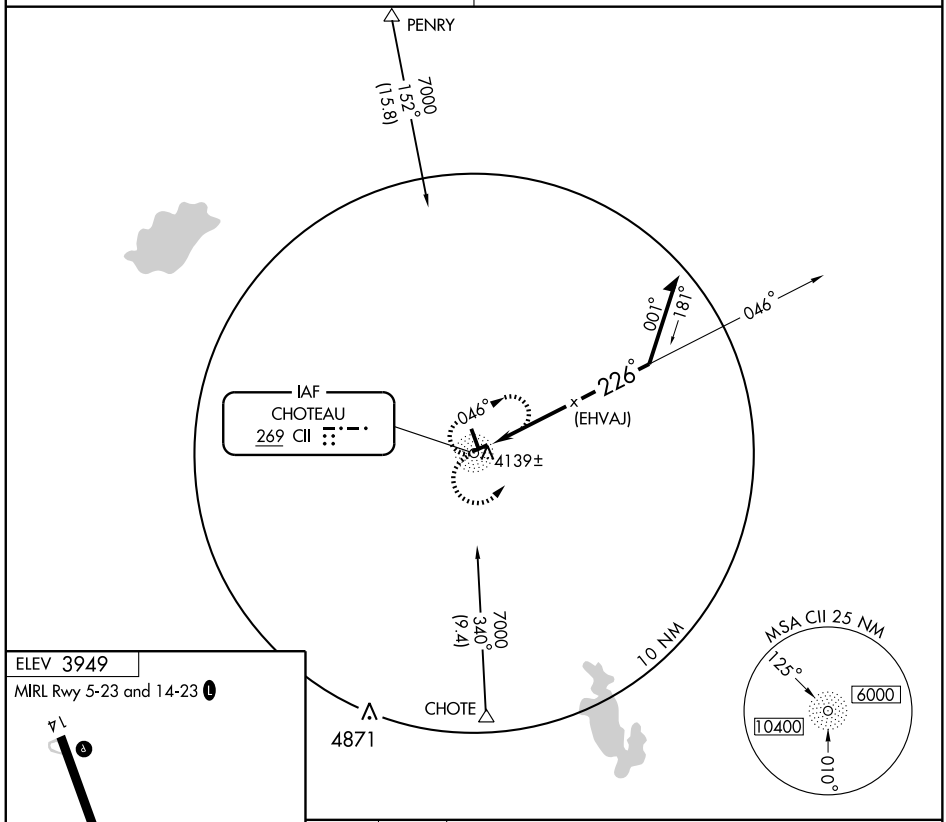
NA

Use Great Falls altimeter setting.

MISSED APPROACH: Climbing left turn to 6000 direct CII NDB and hold.

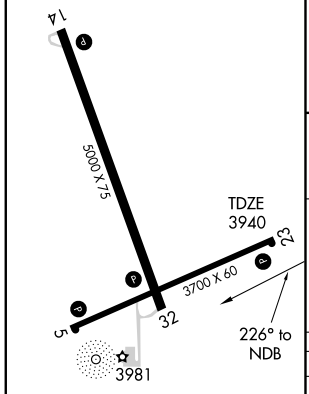
SALT LAKE CITY CENTER
133.4 285.4

UNICOM
122.8 (CTAF) L

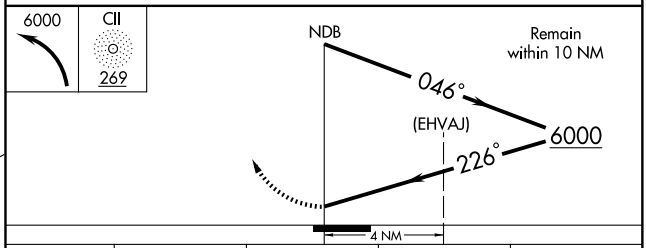


ELEV 3949

MIRL Rwy 5-23 and 14-23 L



Knots	60	90	120	150	180
Min:Sec					

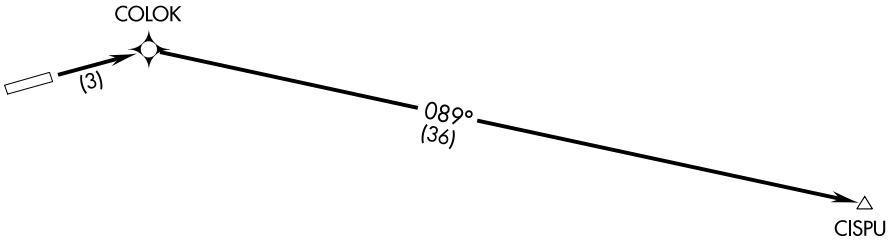


CATEGORY	A	B	C	D
S-23	4720-1 780 (800-1)	4720-1¼ 780 (800-1¼)	4720-2¼ 780 (800-2¼)	NA
CIRCLING	4720-1 775 (800-1)	4720-1¼ 775 (800-1¼)	4720-2¼ 775 (800-2¼)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

CISPU ONE DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
127.75 351.9



TAKE-OFF MINIMUMS

Rwy 6: Standard.
Rwy 24: NA - ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 6: Tree 1492′ from DER, 620′ right of centerline, 20′ AGL/3499′ MSL.
Tree 507′ from DER, 598′ left of centerline, 20′ AGL/3419′ MSL.

NOTE: GPS required.

NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

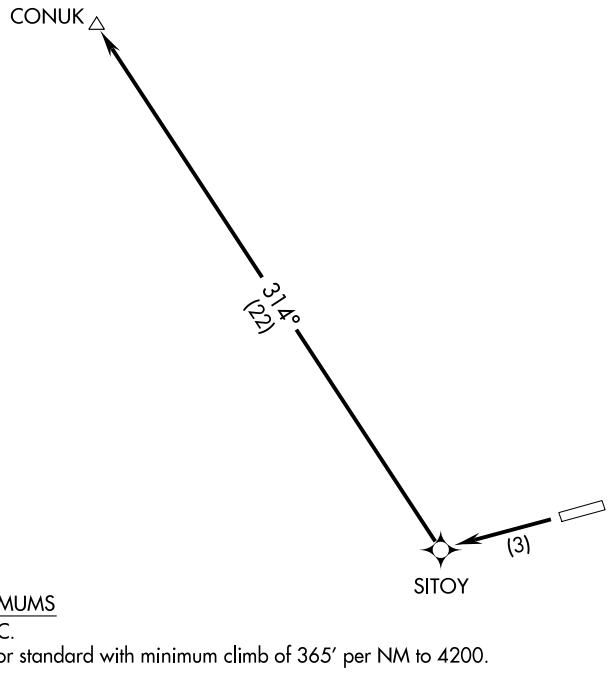
TAKE-OFF RUNWAY 6: Climb direct COLOK then via 089° track to CISPU, thence....

....Maintain 9000, expect filed altitude 10 minutes after departure.

NW-1, 14 JAN 2010 to 11 FEB 2010

CONUK ONE DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
127.75 351.9



TAKE-OFF MINIMUMS

Rwy 6: NA - ATC.
Rwy 24: 600-3 or standard with minimum climb of 365′ per NM to 4200.

TAKE-OFF OBSTACLE NOTE

Rwy 24: Dragline 11510′ from DER, 3559′ right of centerline, 225′ AGL/3964′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 24: Climb direct SITOY then via 314° track to CONUK, thence....

....Maintain 6000, expect filed altitude 10 minutes after departure.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5100
061°	TDZE	3426
	Apt Elev	3426

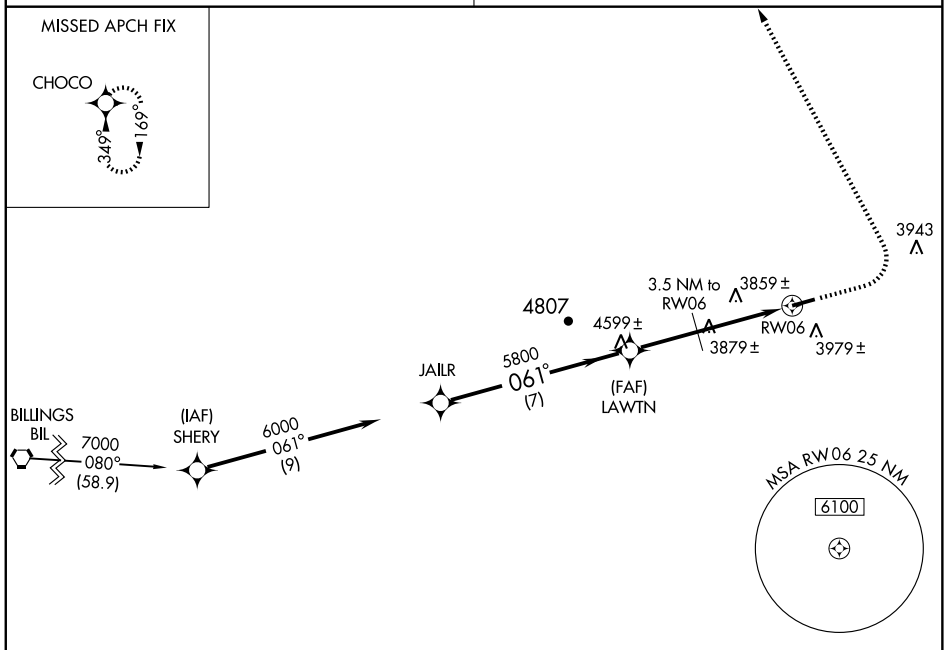
GPS RWY 6
COLSTRIP (M46)

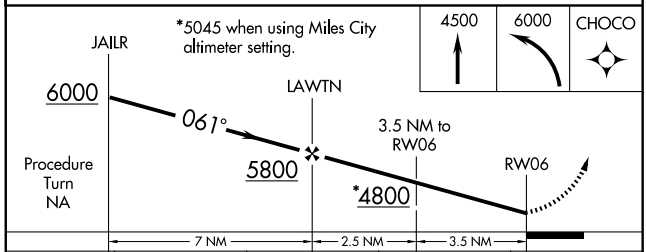
NA

When local altimeter not received use Miles City altimeter setting.

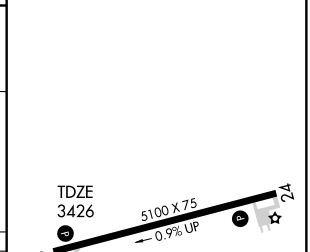
MISSED APPROACH: Climb to 4500 then climbing left turn to 6000 direct CHOCO WP and hold.

SALT LAKE CENTER	CTAF
127.75 351.9	122.9 L





CATEGORY	A	B	C	D
S-6	4220-1 794 (800-1)	4220-1¼ 794 (800-1¼)	4220-2¼ 794 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-6	NA			
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA



MIRL Rwy 6-24 L

NW-1, 14 JAN 2010 to 11 FEB 2010

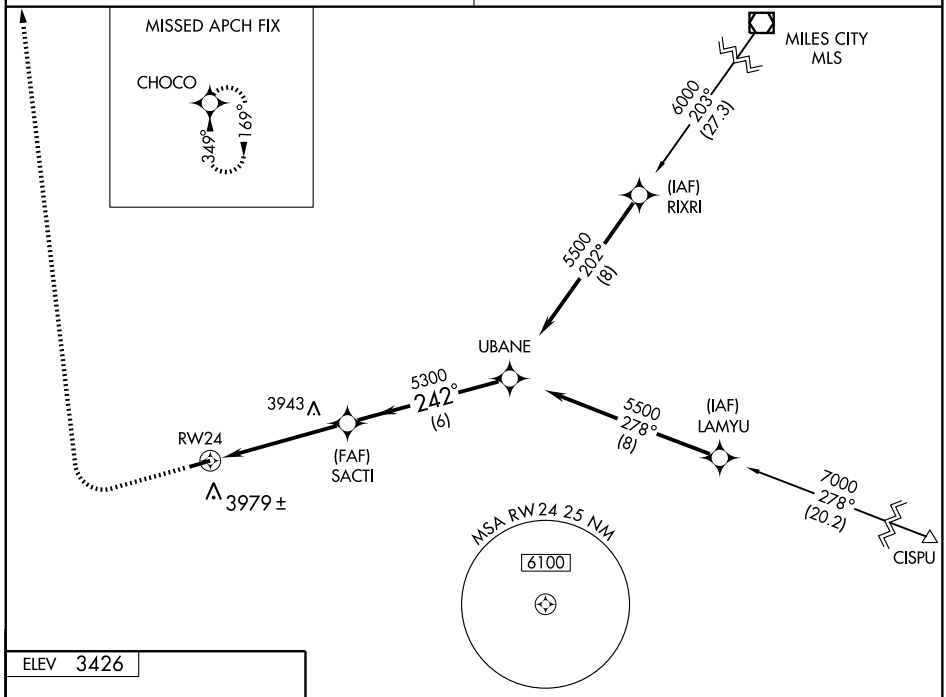
APP CRS	Rwy Idg	5100
242°	TDZE	3411
	Apt Elev	3426

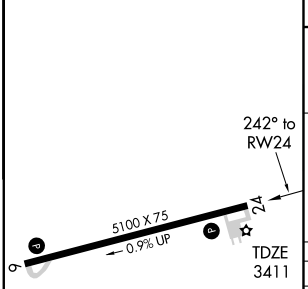
GPS RWY 24
COLSTRIP (M46)

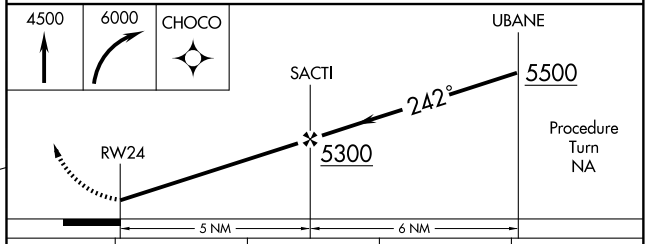
T
NA When local altimeter not received use Miles City altimeter setting.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 direct CHOCO WP and hold.

SALT LAKE CENTER	CTAF
127.75 351.9	122.9 L







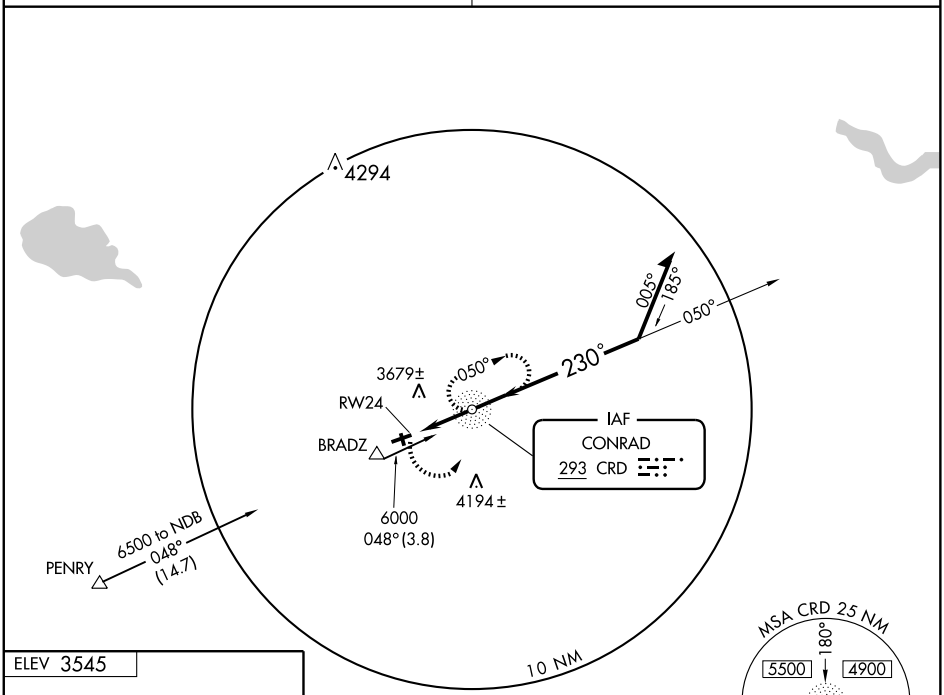
CATEGORY	A	B	C	D
S-24	4200-1 789 (800-1)	4200-1¼ 789 (800-1¼)	4200-2¼ 789 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-24	4440-1¼ 1029 (1100-1¼)	4440-1½ 1029 (1100-1½)	4440-2¾ 1029 (1100-2¾)	NA
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA

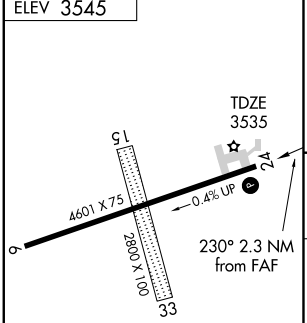
NW-1, 14 JAN 2010 to 11 FEB 2010

NDB CRD	APP CRS	Rwy Idg	4601
293	230°	TDZE	3535
		Apt Elev	3545

NDB or GPS RWY 24
CONRAD (SØ1)

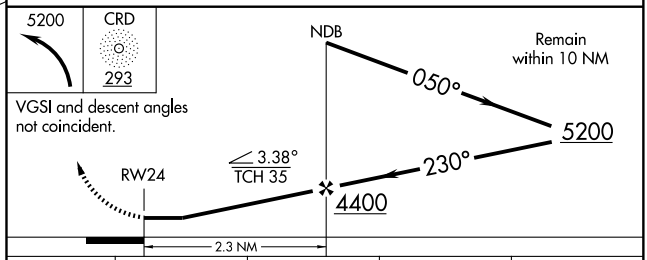
▼ ⚠ NA — Use Cut Bank altimeter setting; if not received, procedure not authorized.	MISSED APPROACH: Climbing left turn to 5200 direct CRD NDB and hold.
SALT LAKE CITY CENTER **133.4 285.4**	UNICOM **122.8** (CTAF) L





MIRL Rwy 6-24 L
REIL Rwy 24 L

FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46



CATEGORY	A	B	C	D
S-24	4260-1	725 (800-1)	4260-2 725 (800-2)	4260-2¼ 725 (800-2¼)
CIRCLING	4260-1	715 (800-1)	4340-2¼ 795 (800-2¼)	NA

APP CRS	Rwy Idg	5300
315°	TDZE	3847
	Apt Elev	3854

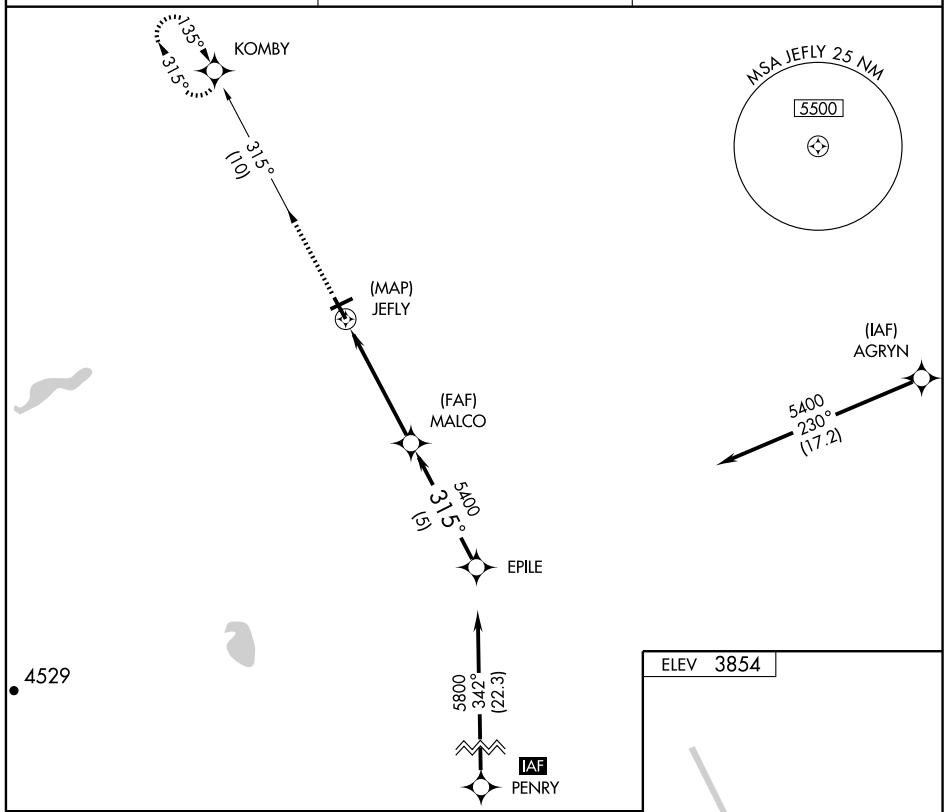
GPS RWY 31
CUT BANK MUNI (CTB)

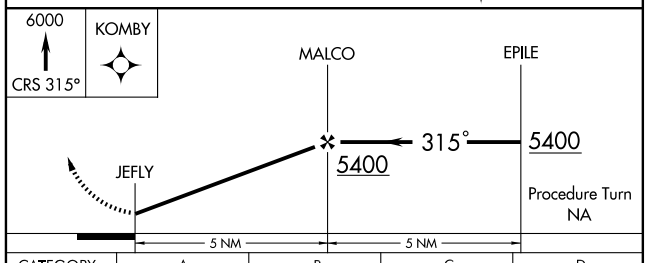
NA

IAF ARM APPROACH MODE PRIOR TO IAF.

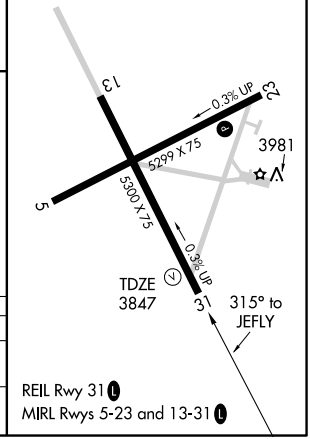
MISSED APPROACH: Climb to 6000 via 315° course to KOMBY WP and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-31	4220-1 373 (400-1)			4220-1¼ 373 (400-1¼)
CIRCLING	4220-1 366 (400-1)	4320-1 466 (500-1)	4320-1½ 466 (500-1½)	4420-2 566 (600-2)



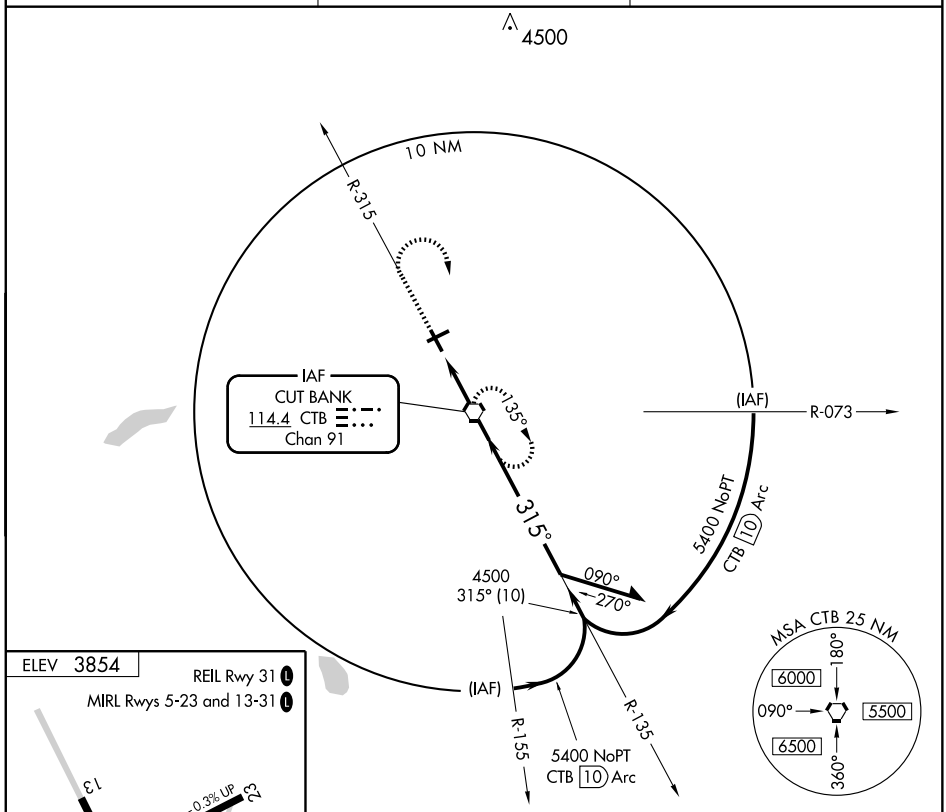
NW-1, 14 JAN 2010 to 11 FEB 2010

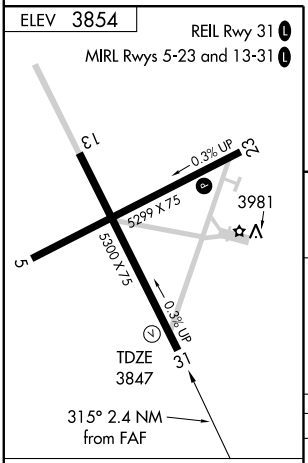
VORTAC CTB	APP CRS	Rwy Idg	5300
114.4	315°	TDZE	3847
Chan 91		Apt Elev	3854

VOR RWY 31
CUT BANK MUNI (CTB)

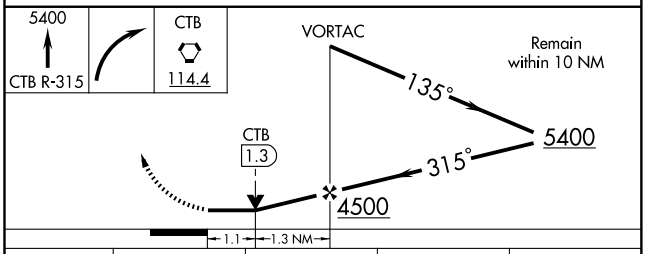
MISSED APPROACH: Climb to 5400 via CTB R-315 then right turn direct CTB VORTAC and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	122.8 (CTAF) L





FAF to MAP 2.4 NM					
Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48



CATEGORY	A	B	C	D
S-31	4200-1 353 (400-1)			4200-1¼ 353 (400-1¼)
CIRCLING	4340-1 486 (500-1)		4340-1½ 486 (500-1½)	4420-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

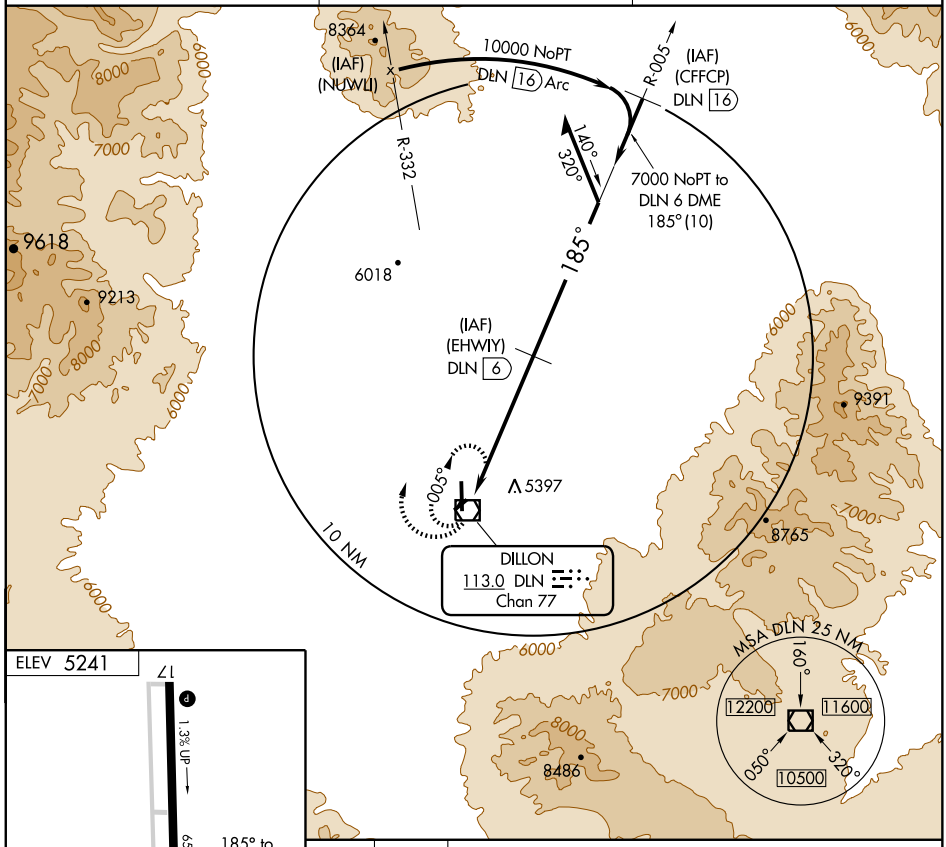
VOR/DME DLN 113.0 Chan 77	APP CRS 185°	Rwy Idg N/A TDZE N/A Apt Elev 5241

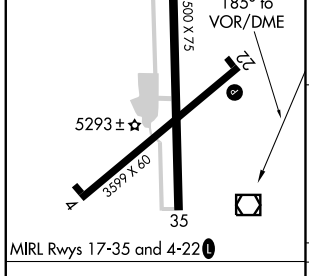
VOR/DME or GPS-B
DILLON (DLN)

Procedure not authorized when Dillon altimeter setting not available.

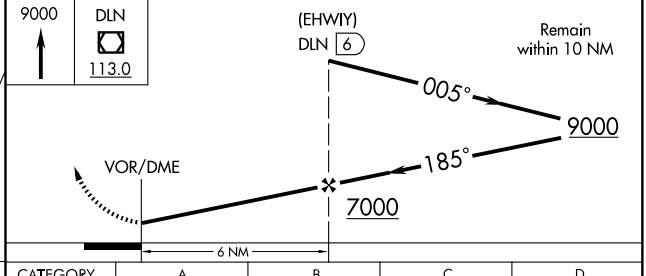
MISSED APPROACH: Climb to 9000 in DLN VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.225	132.4 338.3	122.8 (CTAF) L





MIRL Rwys 17-35 and 4-22 L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	5720-1 482 (500-1)	5740-1 502 (600-1)	5760-1½ 522 (600-1½)	5840-2 602 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

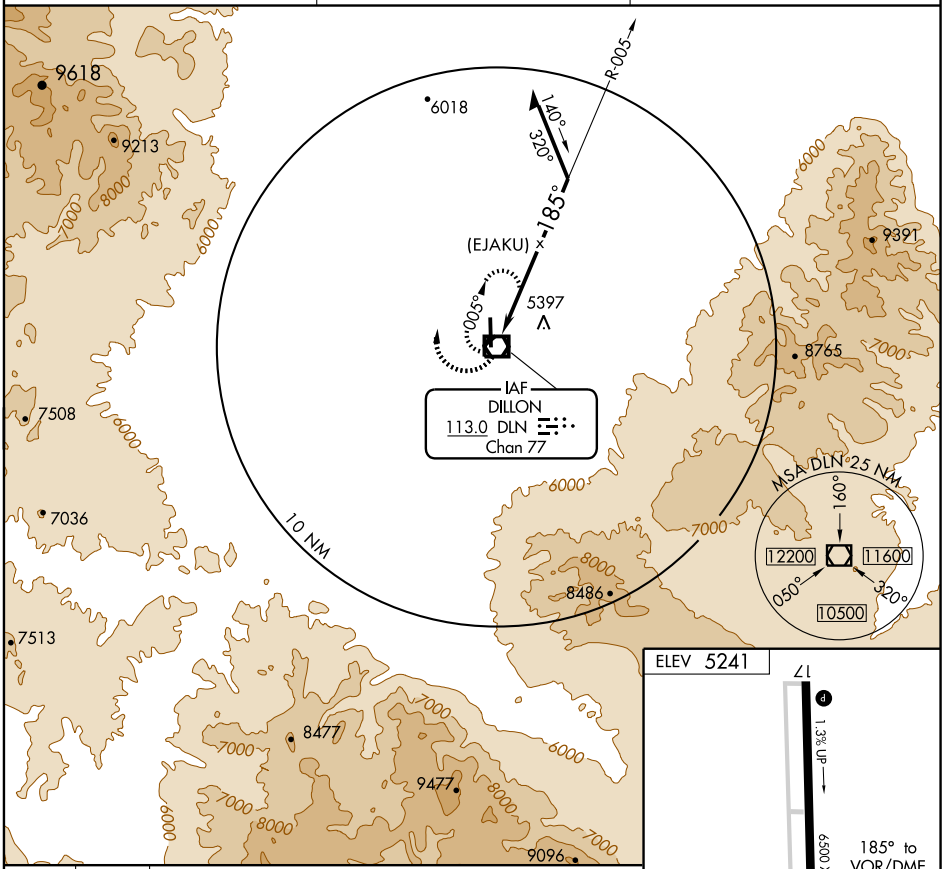
VOR/DME DLN 113.0 Chan 77	APP CRS 185°	Rwy Idg N/A TDZE N/A Apt Elev 5241

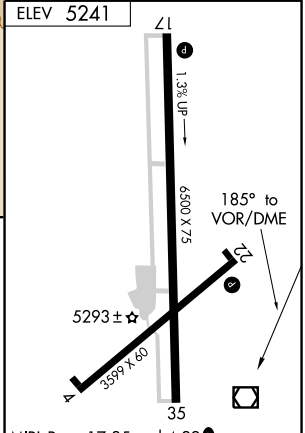
VOR or GPS-A
DILLON (DLN)

Procedure not authorized when Dillon altimeter setting not available.

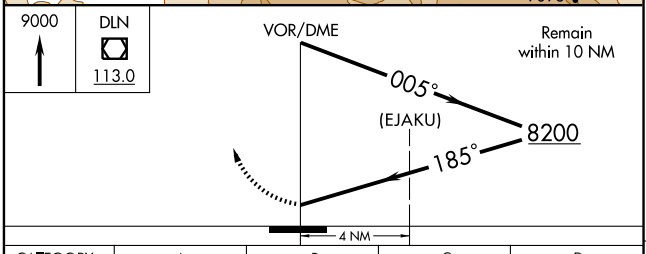
MISSED APPROACH: Climb to 9000 in DLN VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.225	132.4 338.3	122.8 (CTAF) L





MIRL Rwys 17-35 and 4-22 L



CATEGORY	A	B	C	D
CIRCLING	6700-1¼ 1462 (1500-1¼)	6700-1½ 1462 (1500-1½)	6700-3 1462 (1500-3)	

Knots	60	90	120	150	180
Min:Sec					

APP CRS	Rwy Idg	4799
263°	TDZE	2726
	Apt Elev	2727

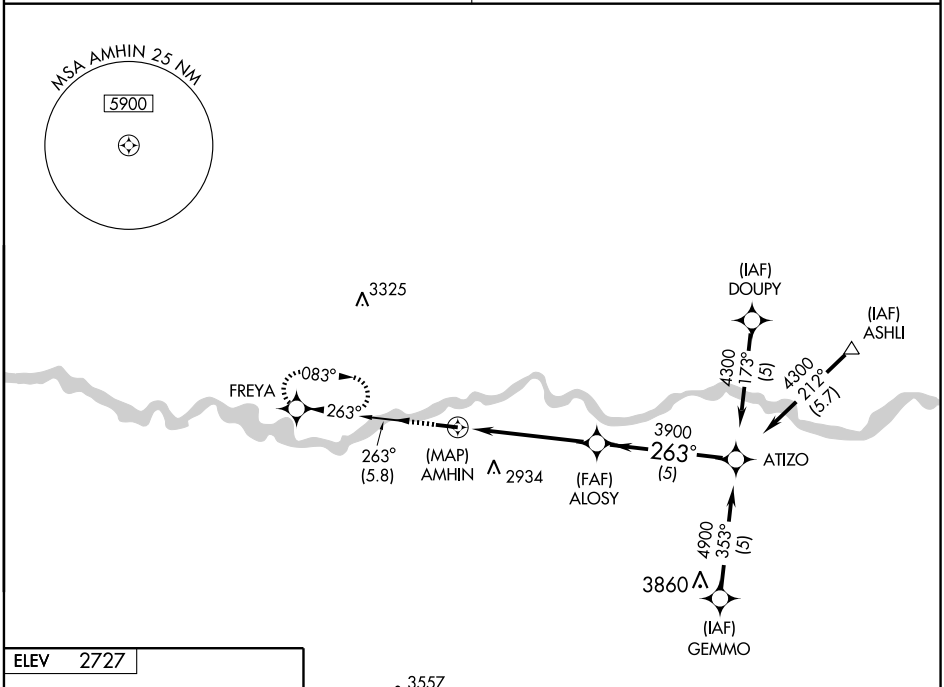
GPS RWY 26

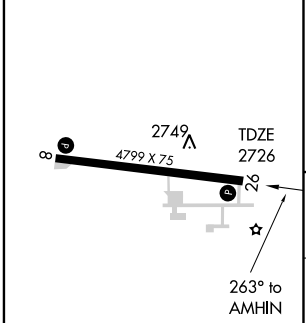
FORSYTH/ TILLITT FIELD (1S3)

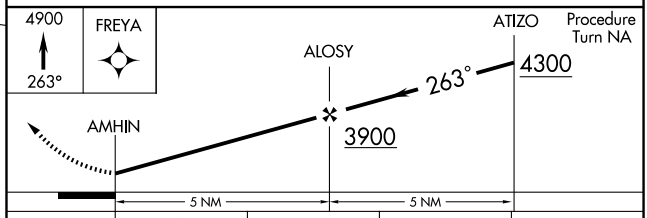
NA Use Miles City altimeter setting, when not available, except for operators with approved weather reporting services, procedure not authorized.

MISSED APPROACH: Climb to 4900 via 263° course to FREYA WP and hold.

GREAT FALLS RADIO	UNICOM
122.2 255.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-26	3200-1 474 (500-1)		3200-1¼ 474 (500-1¼)	3200-1½ 474 (500-1½)
CIRCLING	3280-1 553 (600-1)	3400-1 673 (700-1)	3420-2 693 (700-2)	3440-2¼ 713 (800-2¼)

MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB FOR	APP CRS		
236	257°	Rwy Idg	4799
		TDZE	2726
		Apt Elev	2727

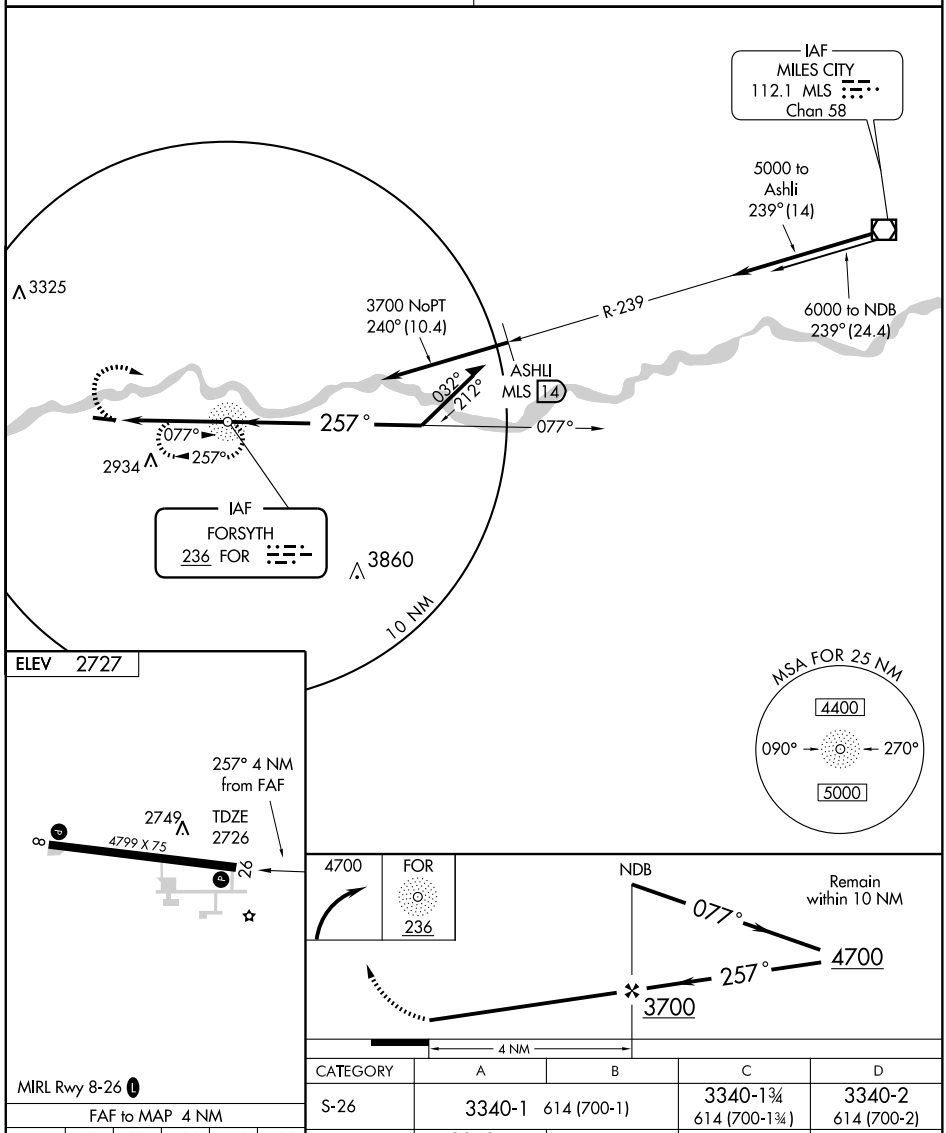
NDB RWY 26

FORSYTH/ TILLITT FIELD (1S3)

NA Use Miles City altimeter setting, when not available, except for operators with approved weather reporting services, procedure not authorized.

MISSED APPROACH: Climbing right turn to 4700 direct FOR NDB and hold.

GREAT FALLS RADIO	UNICOM
122.2 255.4	122.8 (CTAF) L



MIRL Rwy 8-26 L

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

CATEGORY	A	B	C	D
S-26	3340-1 614 (700-1)		3340-1¾ 614 (700-1¾)	3340-2 614 (700-2)
CIRCLING	3340-1 614 (700-1)	3420-1 694 (700-1)	3420-2 694 (700-2)	3440-2¼ 714 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 23

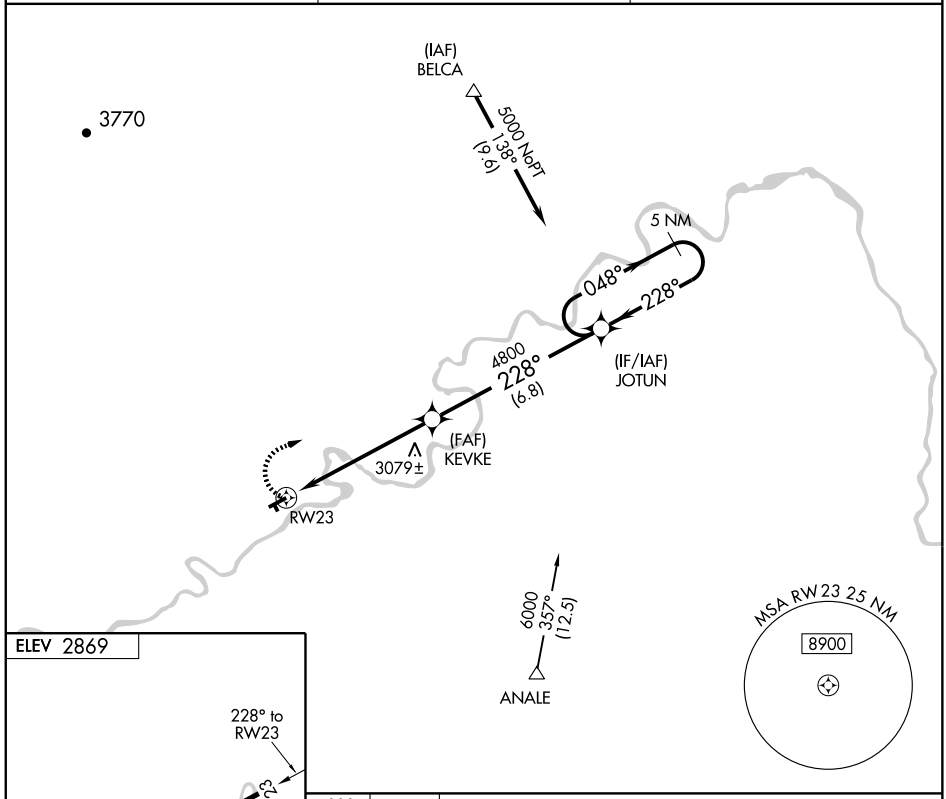
FORT BENTON (79S)

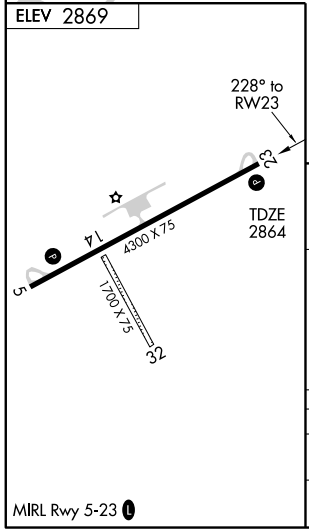
APP CRS	Rwy Idg	4300
228°	TDZE	2864
	Apt Elev	2869

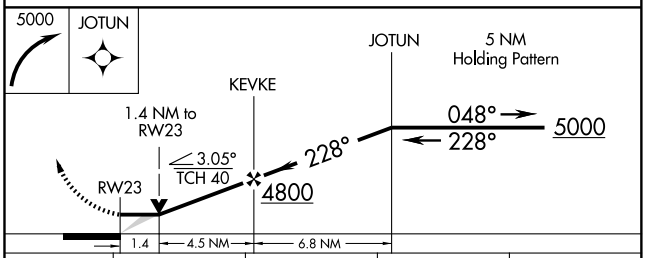
DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Great Falls altimeter setting and increase all MDA 280 feet and all Cat B and C visibilities 1 mile.

MISSED APPROACH: Climbing right turn to 5000 direct JOTUN and hold.

AWOS-A	SALT LAKE CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3340-1	476 (500-1)	3340-1¼ 476 (500-1¼)	NA
CIRCLING	3340-1	471 (500-1)	3340-1½ 471 (500-1½)	NA

MIRL Rwy 5-23 L

APP CRS	Rwy Idg	5001
120°	TDZE	2291
	Apt Elev	2294

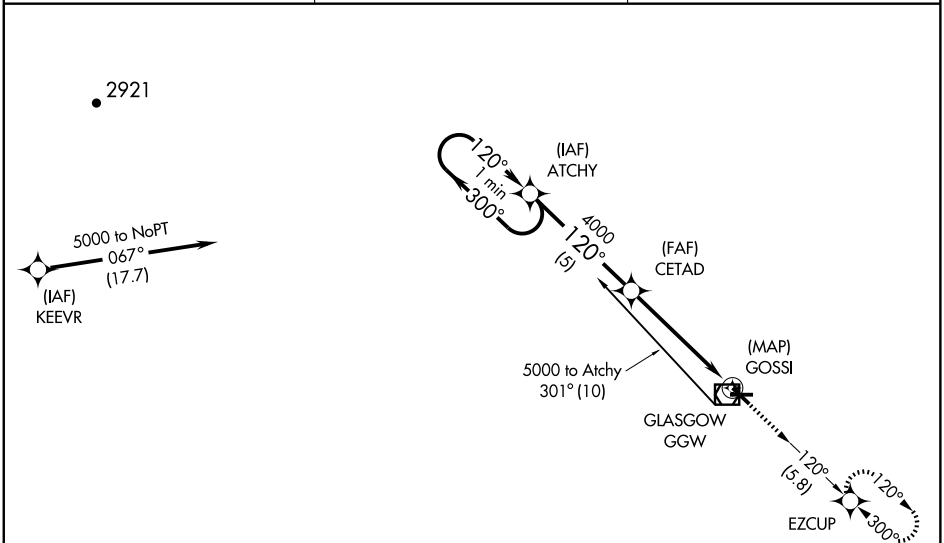
GPS RWY 12

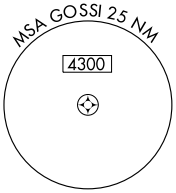
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

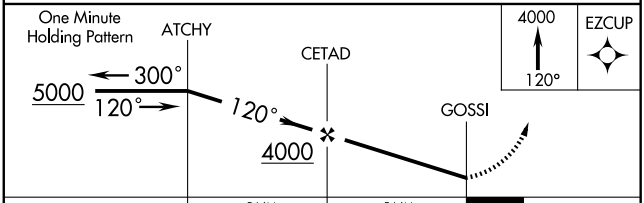
NA

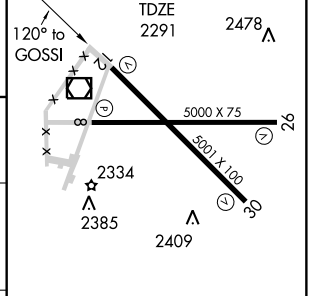
MISSED APPROACH: Climb to 4000 via 120° course to EZCUP WP and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L









CATEGORY	A	B	C	D
S-12	2720-1	429 (500-1)	2720-1¼ 429 (500-1¼)	2720-1½ 429 (500-1½)
CIRCLING	2780-1	486 (500-1)	2780-1½ 486 (500-1½)	2860-2 566 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB MKR	APP CRS		
339	272°	Rwy Idg	5001
		TDZE	2291
		Apt Elev	2294

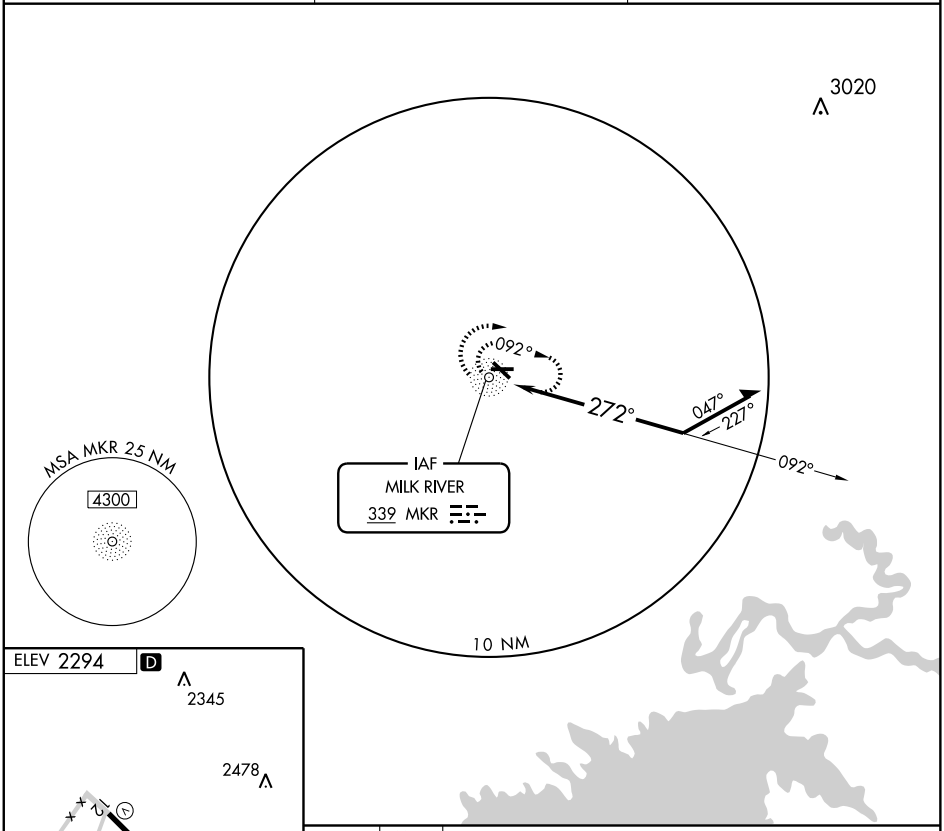
NDB RWY 30

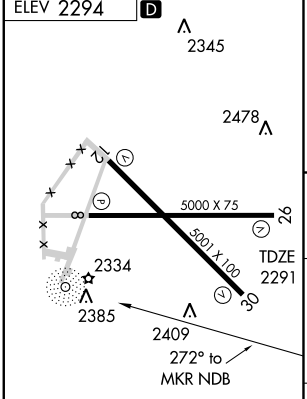
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

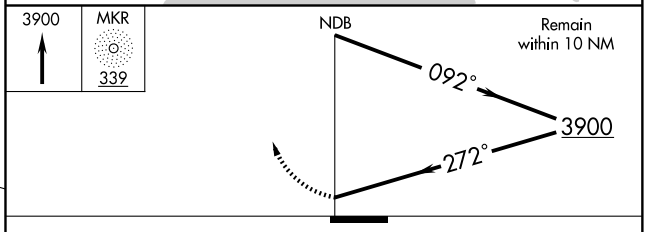
ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

MISSED APPROACH: Climb to 3900 in MKR NDB holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	2840-1	549 (600-1)	2840-1½ 549 (600-1½)	2840-1¾ 549 (600-1¾)
CIRCLING	2840-1	547 (600-1)	2840-1½ 547 (600-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME GGW	APP CRS	Rwy Idg	5001
113.9	293°	TDZE	2291
Chan 86		Apt Elev	2294

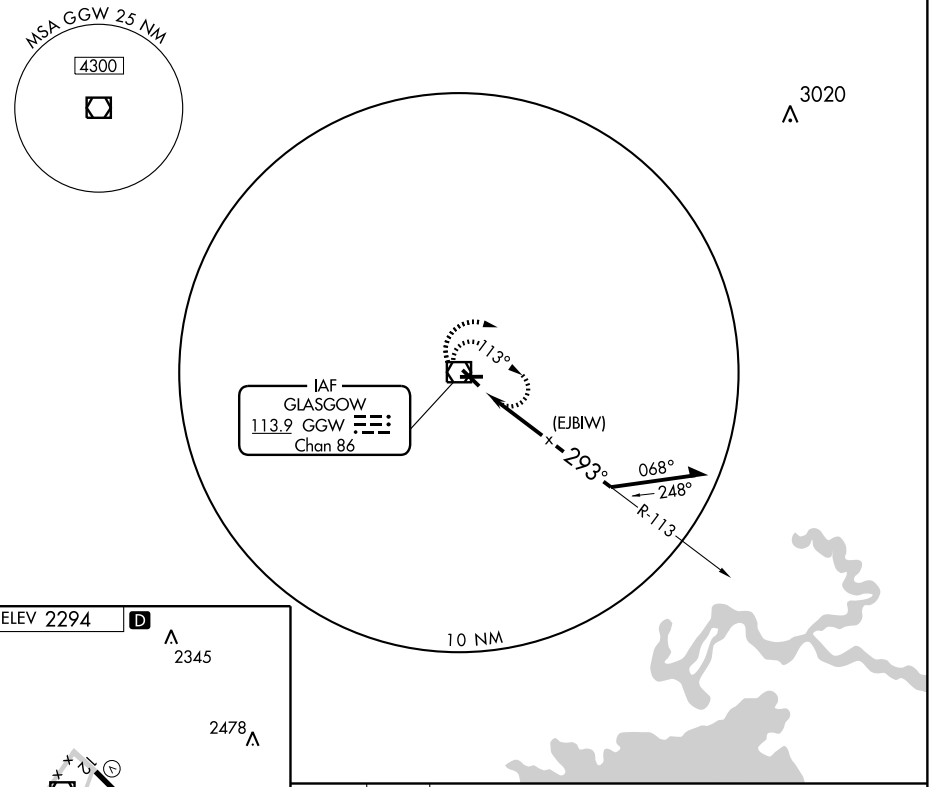
VOR or GPS RWY 30

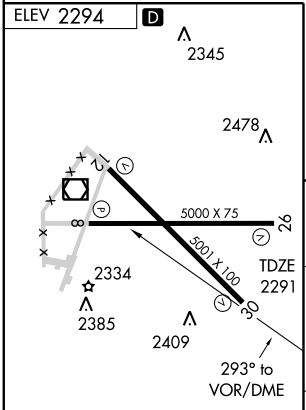
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

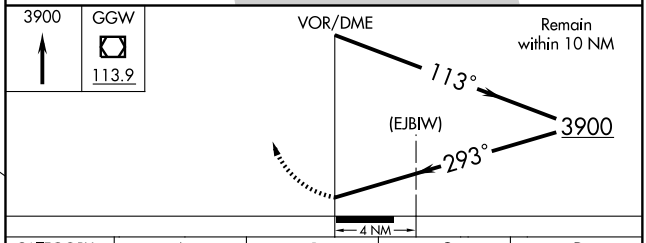
ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

MISSED APPROACH: Climb to 3900 in GGW VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	2780-1	489 (500-1)	2780-1¼ 489 (500-1¼)	2780-1½ 489 (500-1½)
CIRCLING	2780-1	487 (500-1)	2780-1½ 487 (500-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME GGW	APP CRS	Rwy Idg	5001
113.9	133°	TDZE	2291
Chan 86		Apt Elev	2294

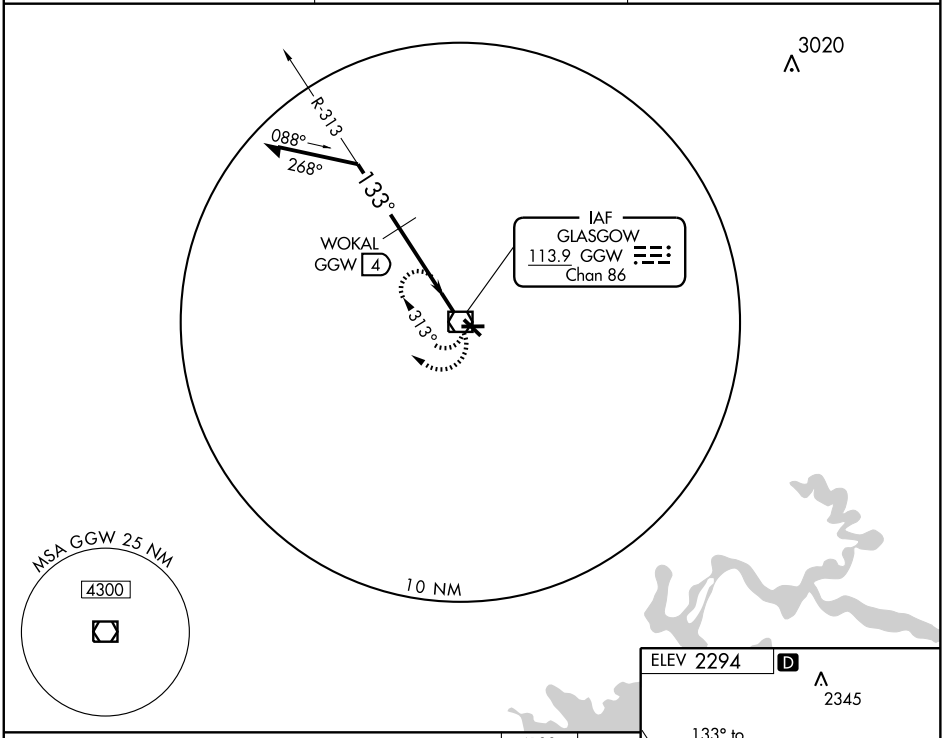
VOR RWY 12

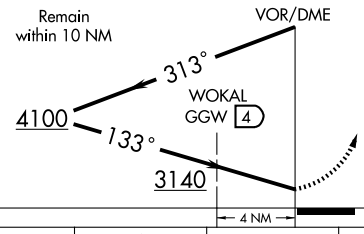
GLASGOW/WOKAL FIELD/GLASGOW INTL (GGW)

ACTIVATE MIRL Rwys 8-26 and 12-30-CTAF.

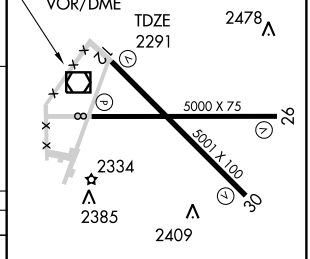
MISSED APPROACH: Climb to 4100 in GGW VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L





4100	GGW 113.9



CATEGORY	A	B	C	D
S-12	3140-1 849 (900-1)	3140-1¼ 849 (900-1¼)	3140-2½ 849 (900-2½)	3140-2¾ 849 (900-2¾)
CIRCLING	3140-1 847 (900-1)	3140-1¼ 847 (900-1¼)	3140-2½ 847 (900-2½)	3140-2¾ 847 (900-2¾)
VOR/DME MINIMUMS				
S-12	2700-1 409 (500-1)		2700-1¼ 409 (500-1¼)	
CIRCLING	2780-1 487 (500-1)		2780-1½ 487 (500-1½)	2860-2 567 (600-2)

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

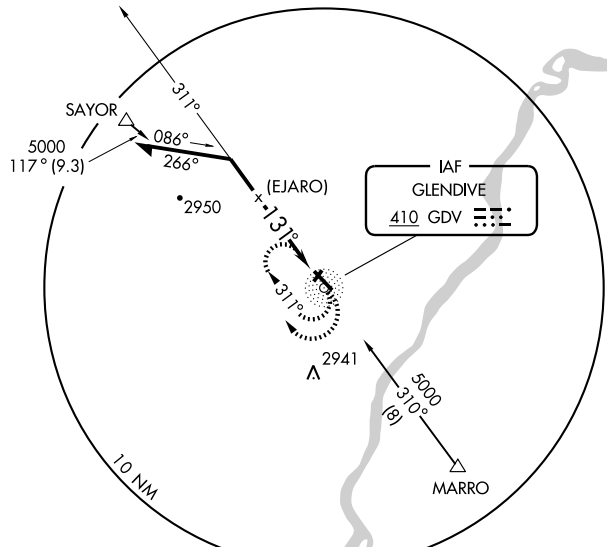
NDB GDV 410	APP CRS 131°	Rwy Idg 5704 TDZE 2456 Apt Elev 2456

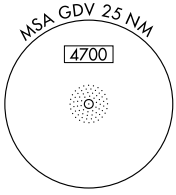
NDB or GPS RWY 12

GLENDIVE/ DAWSON COMMUNITY (GDV)

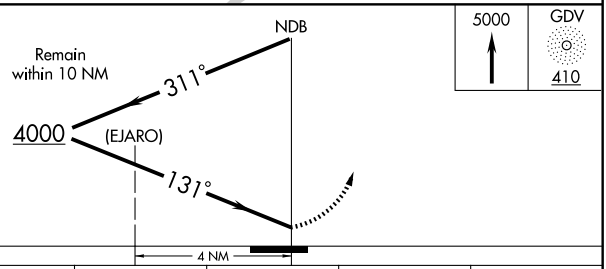
MISSED APPROACH: Climb to 5000 in GDV NDB holding pattern.

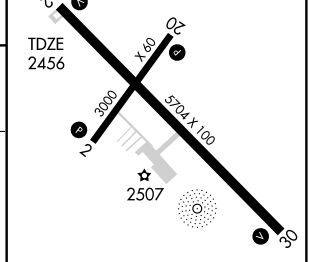
AWOS-3	GREAT FALLS RADIO	UNICOM
135.075	122.55	122.8 (CTAF) L





3122





MIRL Rwys 2-20 and 12-30 L
REIL Rwys 12 and 30

CATEGORY	A	B	C	D
S-12	3300-1 844 (900-1)	3300-1¼ 844 (900-1¼)	3300-2½ 844 (900-2½)	3300-2¾ 844 (900-2¾)
CIRCLING	3300-1 844 (900-1)	3300-1¼ 844 (900-1¼)	3300-2½ 844 (900-2½)	3300-2¾ 844 (900-2¾)

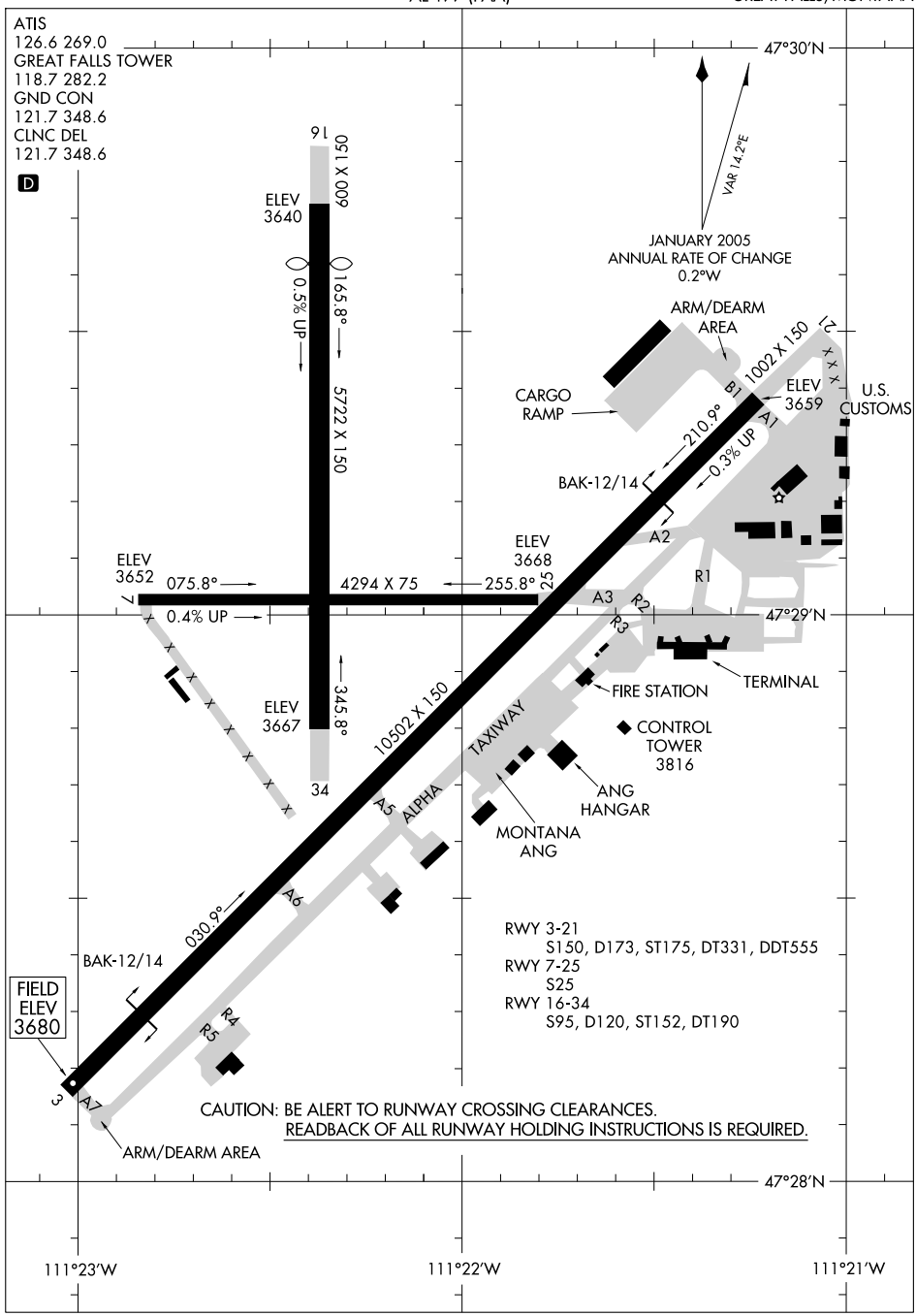
Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-177 (FAA)

GREAT FALLS INTL (GTF)
GREAT FALLS, MONTANA



NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	10502
209°	TDZE	3669
	Apt Elev	3680

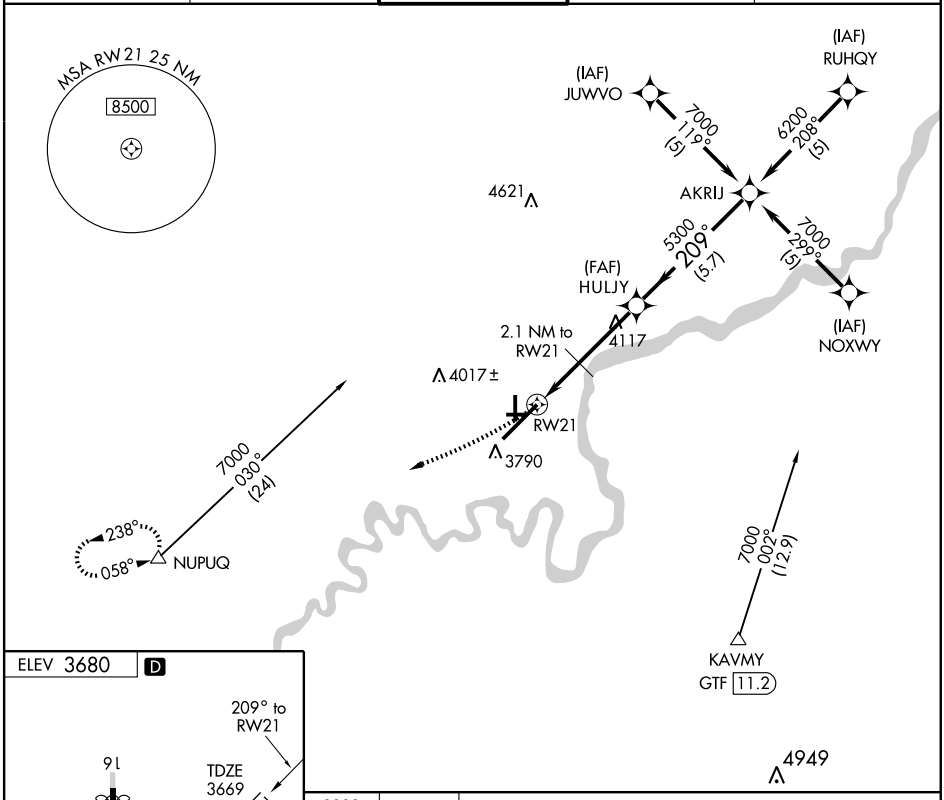
GPS RWY 21

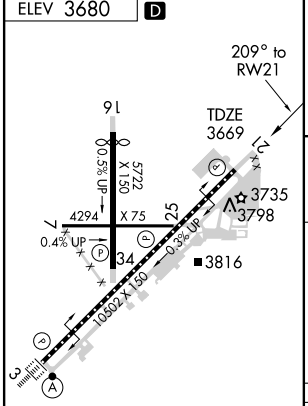
GREAT FALLS INTL (GTF)

NA

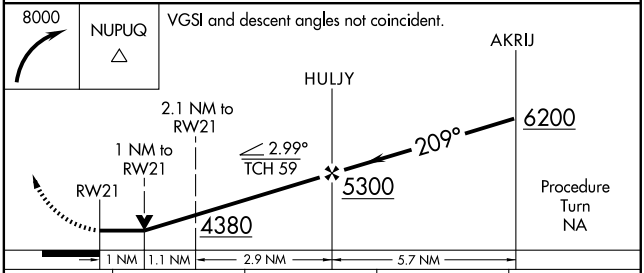
MISSED APPROACH: Climbing right turn to 8000 direct NUPUQ WP and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwy 3-21 and 16-34



CATEGORY	A	B	C	D
S-21	4040-1 371 (400-1)			4040-1¼ 371 (400-1¼)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

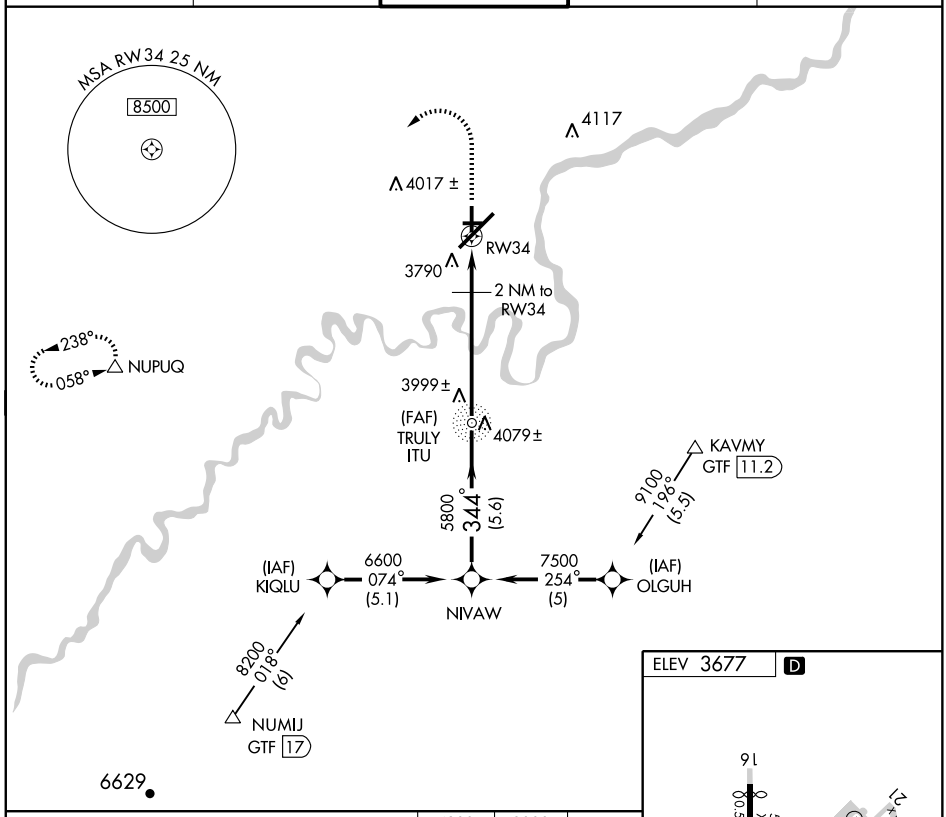
APP CRS	Rwy Idg	5070
344°	TDZE	3669
	Apt Elev	3677

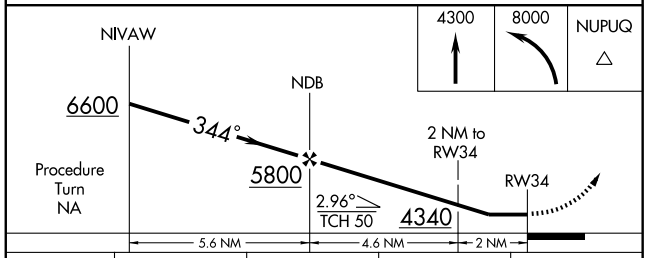
GPS RWY 34
GREAT FALLS INTL (GTF)

NA

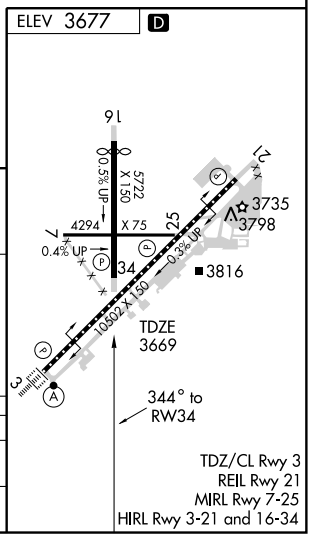
MISSED APPROACH: Climb to 4300, then climbing left turn to 8000 direct NUPUQ WP and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





CATEGORY	A	B	C	D
S-34	4100-1 431 (500-1)		4100-1¼ 431 (500-1¼)	4100-1½ 431 (500-1½)
CIRCLING	4120-1 443 (500-1)	4140-1 463 (500-1)	4140-1½ 463 (500-1½)	4240-2 563 (600-2)



NW-1, 14 JAN 2010 to 11 FEB 2010

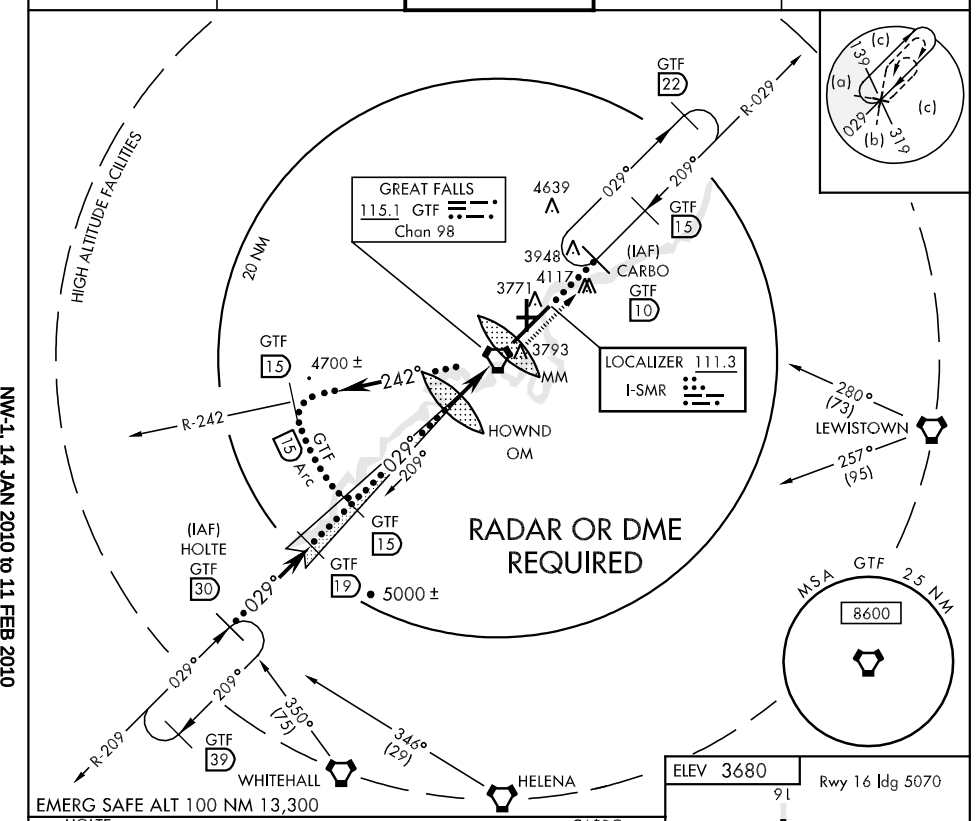
HI-ILS RWY 3

LOC I-SMR	APCH CRS	Rwy ldg 10,502 / TDZE 3674 / Arpt Elev 3680	JAL 177 [USAF]	GREAT FALLS INTL (KGTF)
111.3	029°			

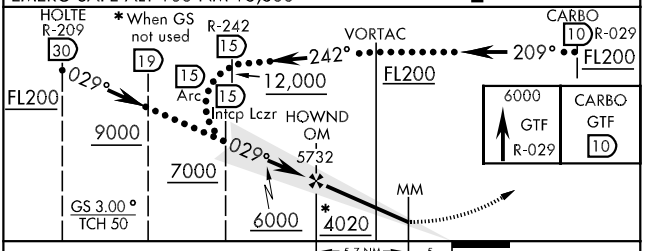
ALSF-2

MISSED APPROACH: Climb to 6000 via GTF R-029 to CARBO 10 DME and hold.

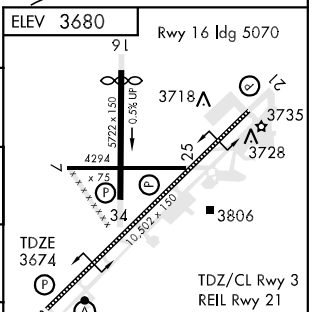
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



EMERG SAFE ALT 100 NM 13,300



CATEGORY	C	D	E
S-ILS 3	3874/24	200 (200-½)	
S-LOC 3	4020/24 346 (400-½)	4020/40 346 (400-¾)	
CIRCLING	4140-1½ 466 (500-1½)	4240-2 566 (600-2)	4420-2¾ 746 (800-2¾)



FAF to MAP 6.2 NM					
Knots	120	140	160	180	200
Min:Sec	3:06	2:39	2:20	2:04	1:52

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-VOR/DME or TACAN RWY 3

VORTAC GTF	APCH CRS	Rwy ldg 10,502
115.1	029°	TDZE 3674
Chan 98		Arpt Elev 3680

JAL 177 [USAF]

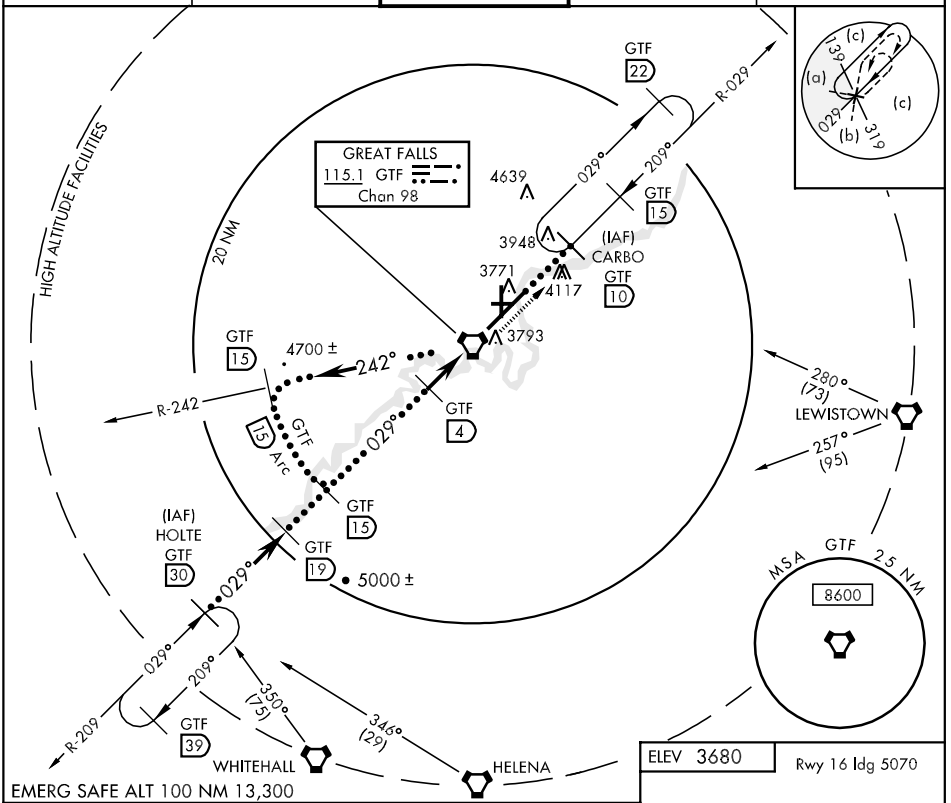
GREAT FALLS INTL (KGTF)

* When ALS inop, increase CAT DE RVR to 60 and vis to 1¼ miles.

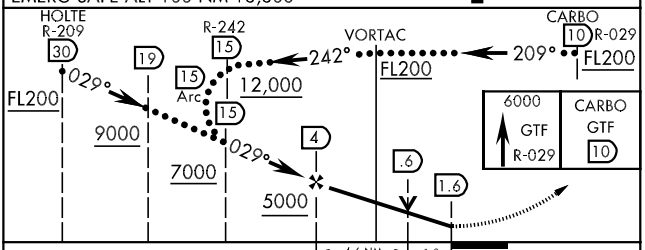
ALSF-2

MISSED APPROACH: Climb to 6000 via GTF R-029 to CARBO 10 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



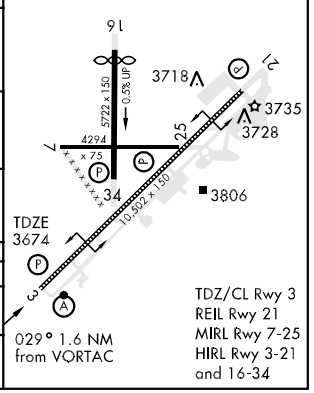
EMERG SAFE ALT 100 NM 13,300



CATEGORY	C	D	E
S-3 *	4060/24 386 (400-½)	4060/50 386 (400-1)	
CIRCLING	4140-1½ 466 (500-1½)	4240-2 566 (600-2)	4420-2¾ 746 (800-2¾)

ELEV 3680

Rwy 16 ldg 5070



HI-VOR/DME or TACAN RWY 21

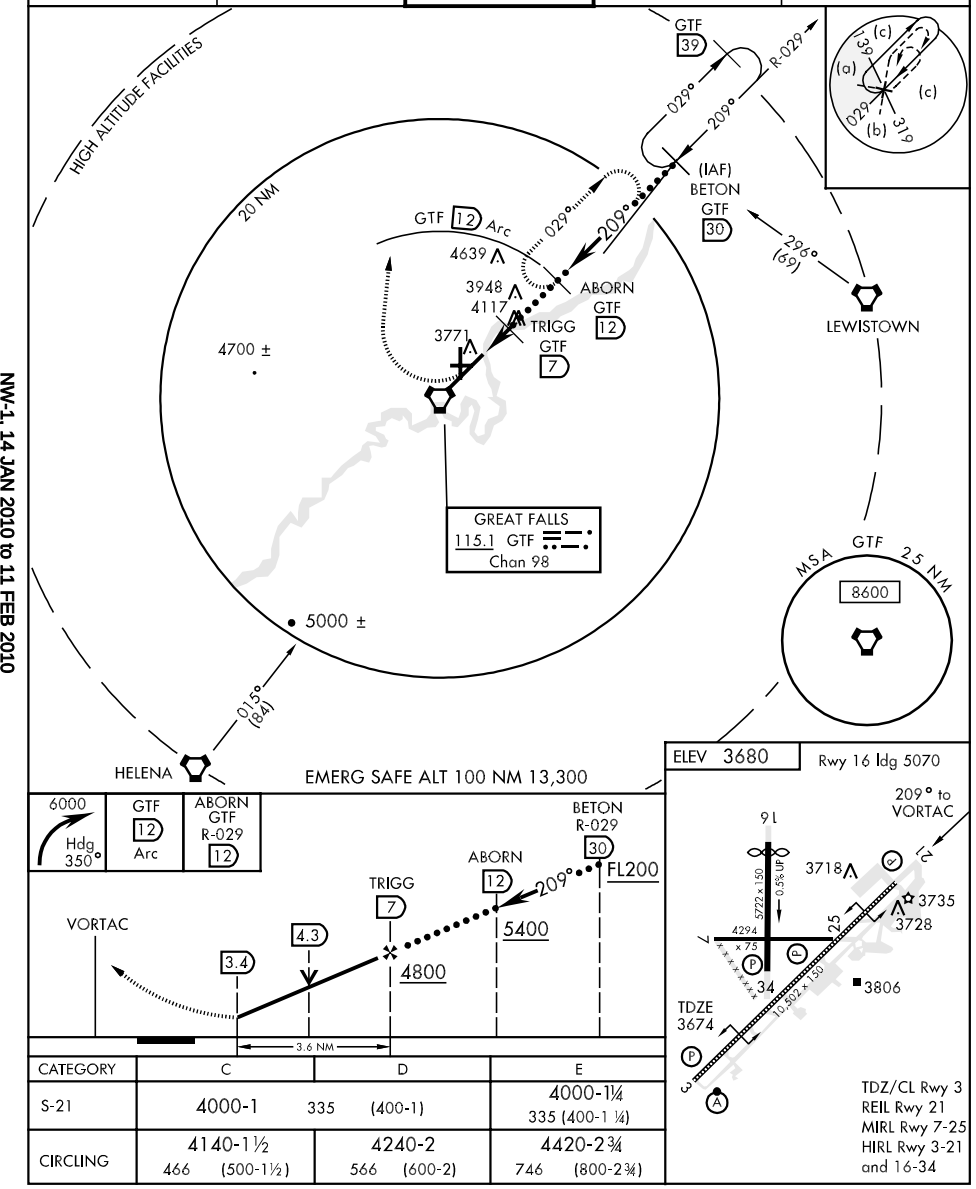
VORTAC GTF 115.1 Chan 98	APCH CRS 209°	Rwy ldg 10,502 TDZE 3665 Arpt Elev 3680

JAL-177 [USAF]

GREAT FALLS INTL (KGTF)

MISSED APPROACH: Climbing right turn to 6000 heading 350°, intercept GTF 12 DME Arc to ABORN 12 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



CATEGORY	C	D	E
S-21	4000-1 335 (400-1)		4000-1¼ 335 (400-1 ¼)
CIRCLING	4140-1½ 466 (500-1½)	4240-2 566 (600-2)	4420-2¾ 746 (800-2¾)

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	029°	TDZE	3680
Chan 50		Apt Elev	3680

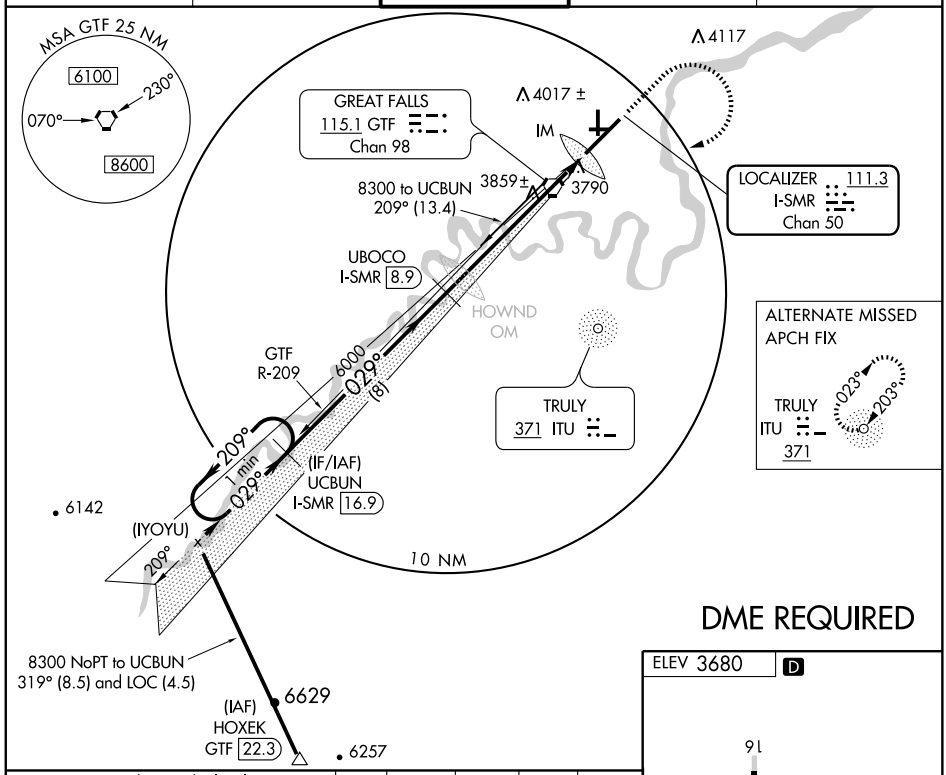
ILS or LOC/DME RWY 3

GREAT FALLS INTL (GTF)

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



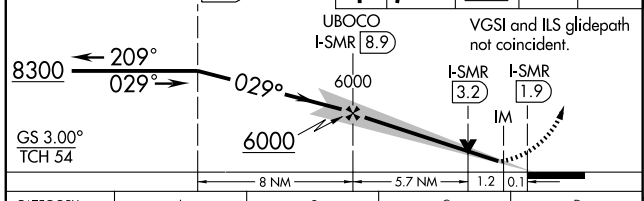
DME REQUIRED

Use I-SMR DME when on the localizer course.

One Minute Holding Pattern

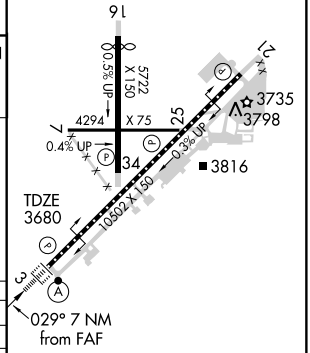
UCBUN I-SMR 16.9

5000	8300	GTF 115.1	GTF R-209	UCBUN GTF 13.4



CATEGORY	A	B	C	D
S-ILS 3	3880/18	200 (200-½)		
S- LOC 3	4160/24	480 (500-½)	4160/40 480 (500-¾)	4160/50 480 (500-1)
CIRCLING	4160-1	480 (500-1)	4160-1½ 480 (500-1½)	4240-2 560 (600-2)

ELEV 3680 D



TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	029°	TDZE	3680
Chan 50		Apt Elev	3680

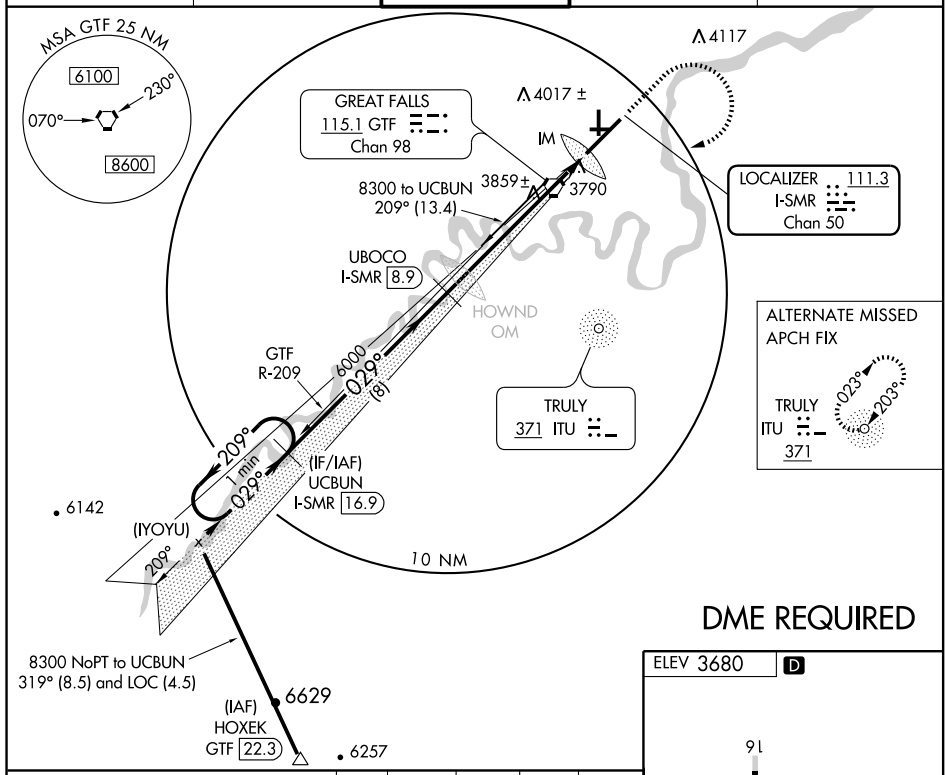
ILS RWY 3 (CAT II)

GREAT FALLS INTL (GTF)

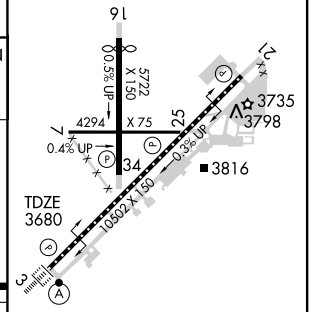
ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6



DME REQUIRED



Use I-SMR DME when on the localizer course.

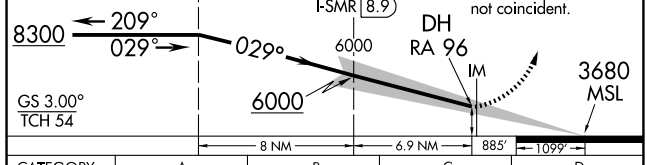
One Minute Holding Pattern

UCBUN I-SMR 16.9

5000	8300	GTF 115.1	GTF R-209	UCBUN GTF 13.4

UBOCO I-SMR 8.9

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 3	RA 96/12 100 DA 3780			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	029°	TDZE	3680
Chan 50		Apt Elev	3680

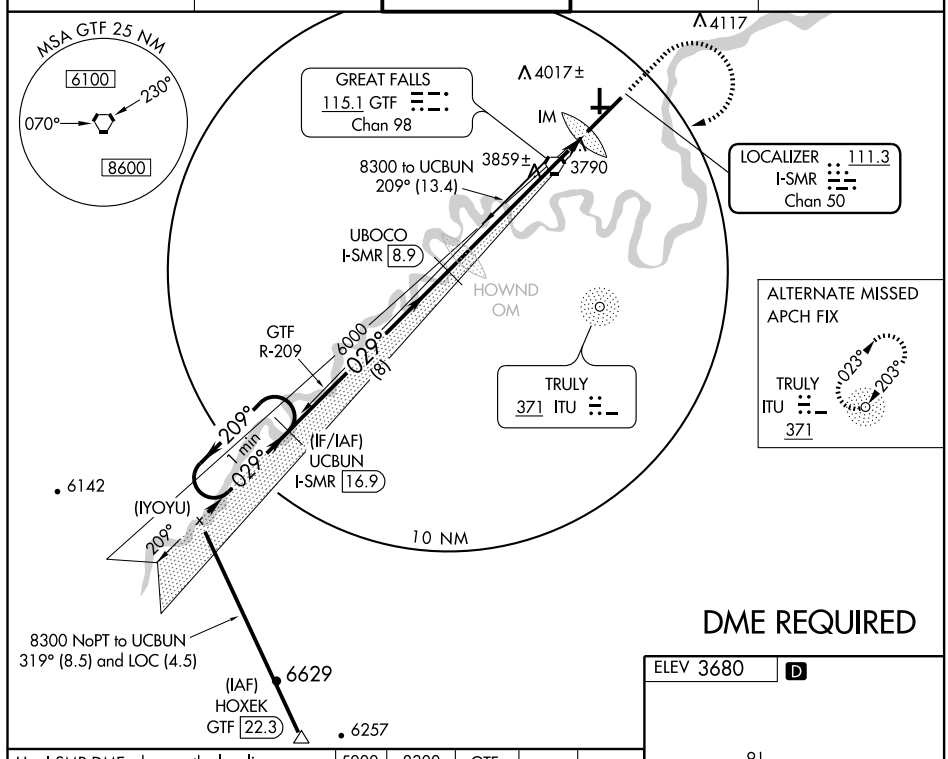
ILS RWY 3 (CAT III)

GREAT FALLS INTL (GTF)

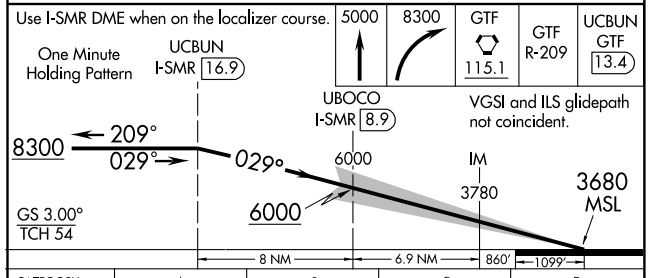
ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then via GTF VORTAC R-209 to UCBUN/GTF VORTAC 13.4 DME and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

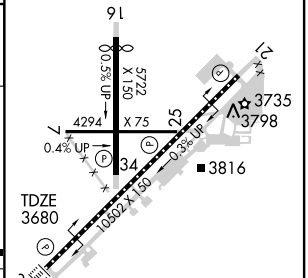


DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 3	CAT IIIa		RVR 07	
S-ILS 3	CAT IIIb		RVR 06	
S-ILS 3	CAT IIIc		NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 3
MIRL Rwy 7-25
REIL Rwy 21
HIRL Rwys 3-21 and 16-34

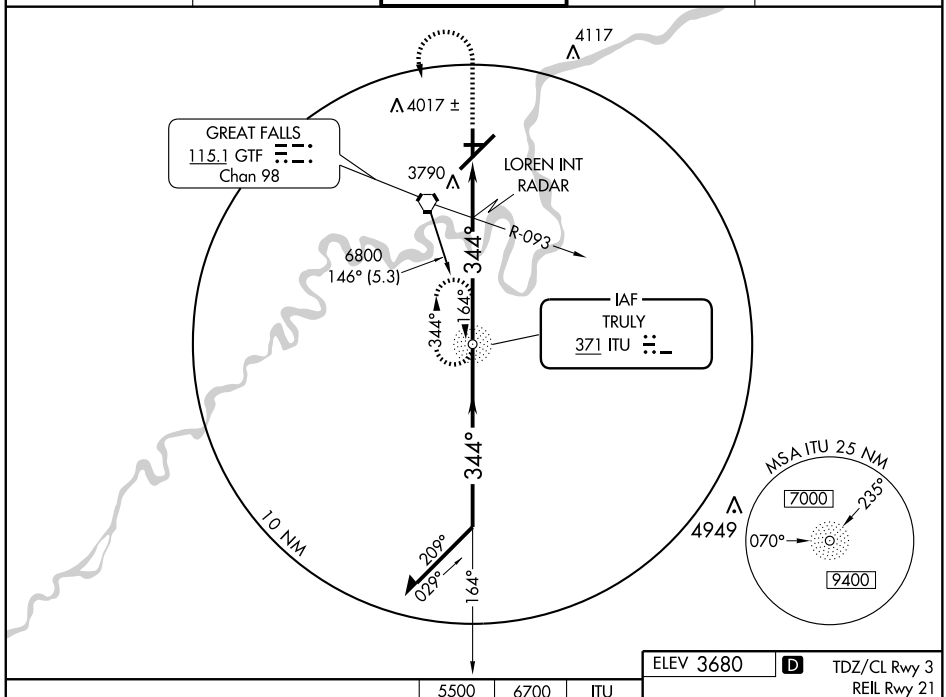
NW-1, 14 JAN 2010 to 11 FEB 2010

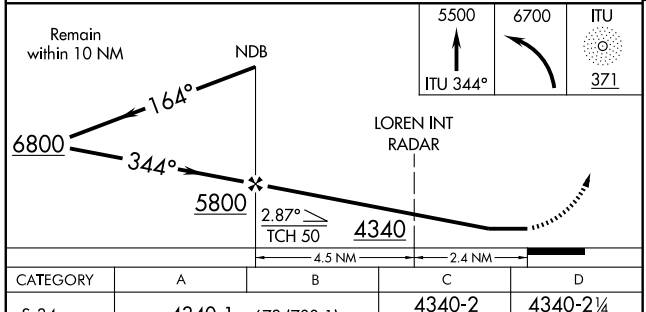
NDB ITU	APP CRS		
371	344°	Rwy Idg	5070
		TDZE	3667
		Apt Elev	3680

NDB RWY 34
GREAT FALLS INTL (GTF)

MISSED APPROACH: Climb to 5500 via ITU NDB 344° bearing, then left turn to 6700 direct ITU NDB and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

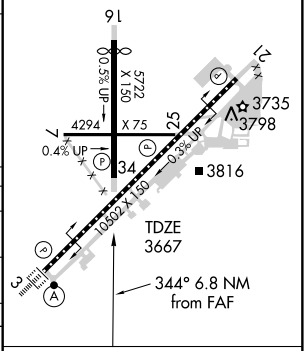




CATEGORY	A	B	C	D
S-34	4340-1	673 (700-1)	4340-2 673 (700-2)	4340-2¼ 673 (700-2¼)
CIRCLING	4340-1	660 (700-1)	4340-2 660 (700-2)	4340-2¼ 660 (700-2¼)
LOREN INT/RADAR MINIMUMS				
S-34	4120-1	453 (500-1)	4120-1¼ 453 (500-1¼)	4120-1½ 453 (500-1½)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

ELEV 3680 D

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21 and 16-34



FAF to MAP 6.8 NM

Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 70602 W03A	APP CRS 029°	Rwy Idg 10502 TDZE 3680 Apt Elev 3680

RNAV (GPS) RWY 3
GREAT FALLS INTL (GTF)

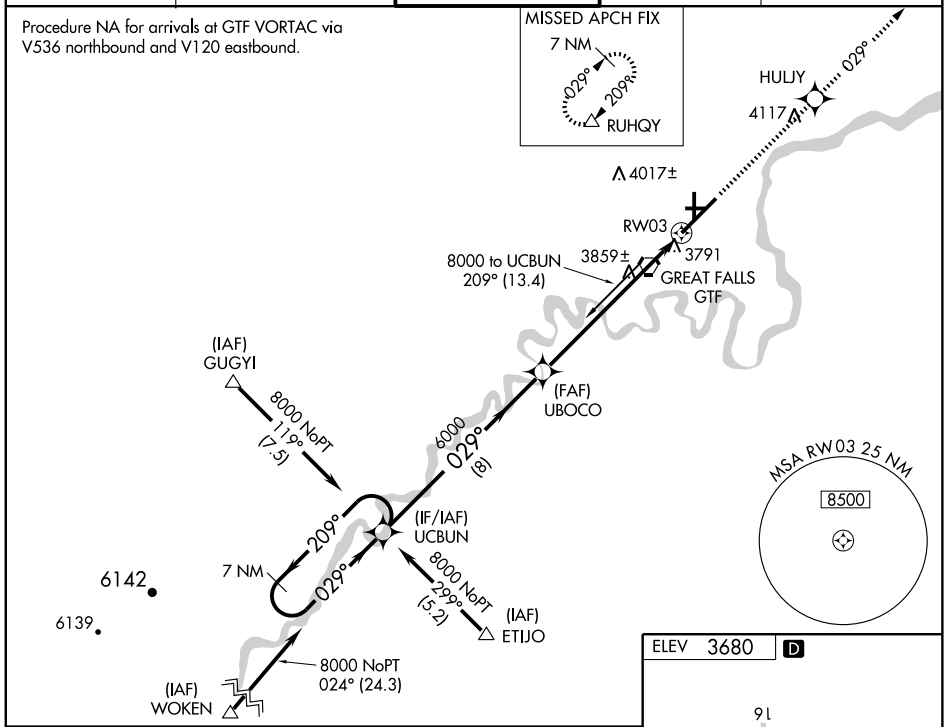
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 42°C (107°F).

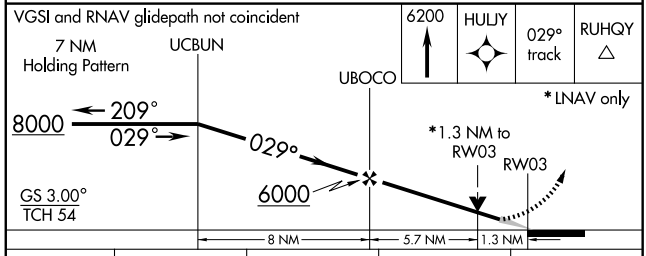
ALSF-2

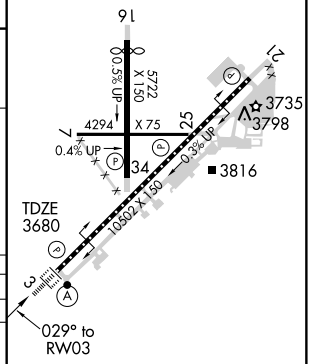
MISSED APPROACH: Climb to 6200 direct HULJY and via 029° track to RUHQY and hold.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

Procedure NA for arrivals at GTF VORTAC via V536 northbound and V120 eastbound.







TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21 and 16-34

CATEGORY	A	B	C	D
LPV DA	3930/24 250 (300-½)			
LNAV/VNAV DA	4067/40 387 (400-¾)			
LNAV MDA	4160/24 480 (500-½)		4160/40 480 (500-¾)	4160/50 480 (500-1)
CIRCLING	4160-1 480 (500-1)		4160-1½ 480 (500-1½)	4240-2 560 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC GTF 115.1 Chan 98	APP CRS 029°	Rwy Idg 10502 TDZE 3680 Apt Elev 3680

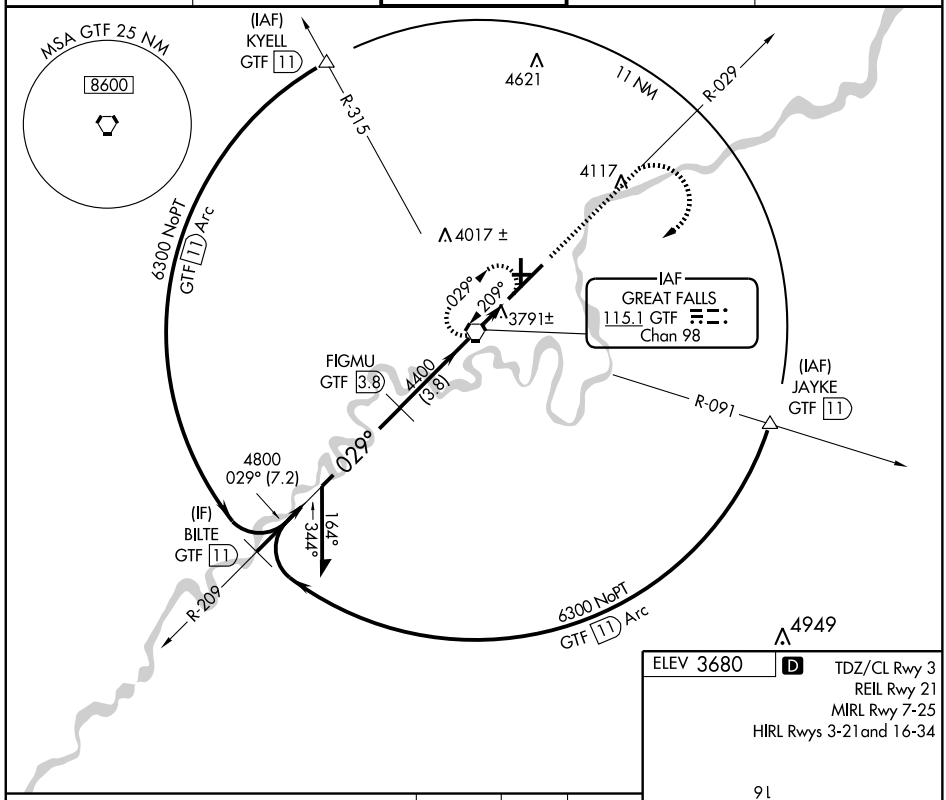
VOR/DME RWY 3
GREAT FALLS INTL (GTF)

T For inoperative ALSF-2, increase S-3 Cat. D visibility to RVR 6000.

ALSF-2

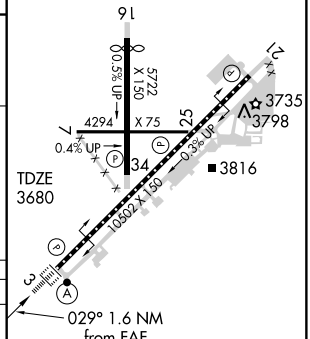
MISSED APPROACH: Climb to 5000 via GTF VORTAC R-029 then climbing right turn to 6300 direct GTF VORTAC and hold, continue climb-in-hold to 6300.

ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6

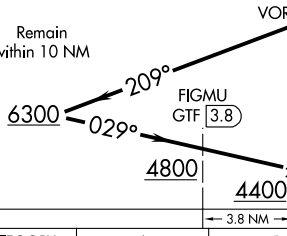


ELEV 3680 D

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 7-25
HIRL Rwys 3-21and 16-34



VGSI and descent angles not coincident.



5000 GTF R-029	6300	GTF 115.1

CATEGORY	A	B	C	D
S-3	4060/24 380 (400-½)			4060/50 380 (400-1)
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

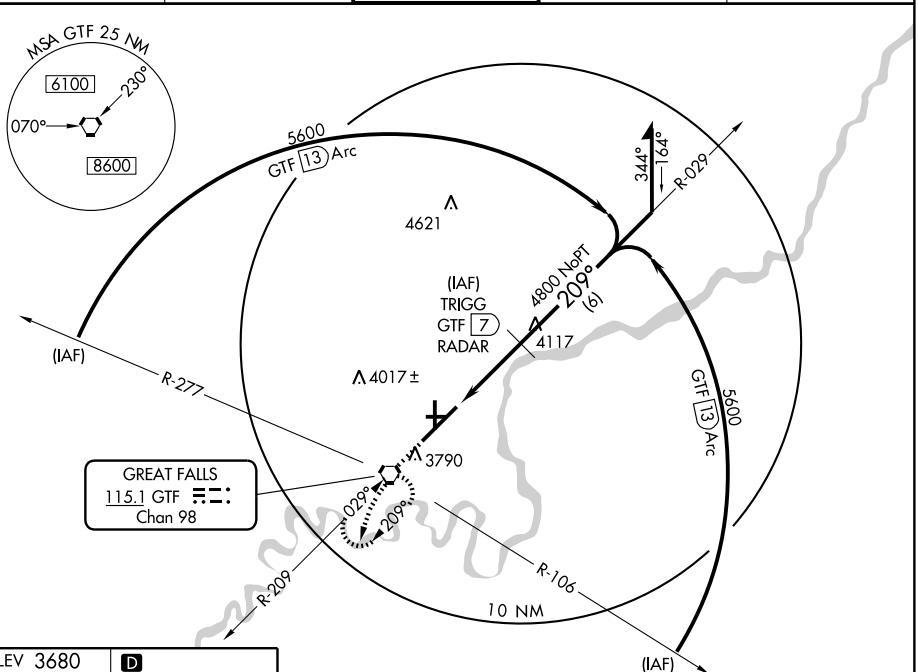
NW-1, 14 JAN 2010 to 11 FEB 2010

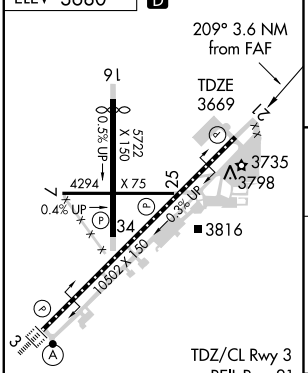
VORTAC GTF 115.1 Chan 98	APP CRS 209°	Rwy Idg 10502 TDZE 3669 Apt Elev 3680

VOR RWY 21
GREAT FALLS INTL (GTF)

MISSED APPROACH: Climb direct to GTF VORTAC continue climb to 5500 in GTF VORTAC holding pattern.

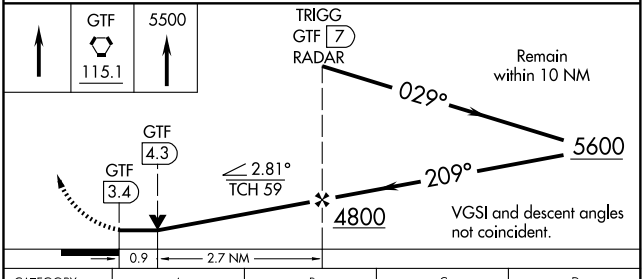
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 259.1	118.7 282.2	121.7 348.6	121.7 348.6





DME or RADAR REQUIRED

4949



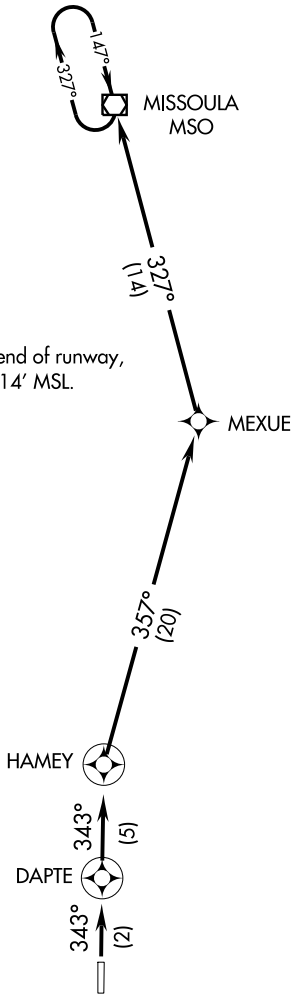
FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
S-21	4000-1 331 (400-1)			
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

HAMEY ONE DEPARTURE (RNAV) (OBSTACLE)

SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4



TAKE-OFF MINIMUMS
Rwy 16: NA, Obstacles.
Rwy 34: Standard.

TAKE-OFF OBSTACLES
Rwy 34: tree 1044' from departure end of runway, 258' right of centerline, 80' AGL/3714' MSL.
Rwy 16: NA, Obstacles.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Not authorized, Obstacles.
TAKE-OFF RWY 34: Climb to 9000 direct DAPTE WP, direct HAMEY WP, then via depicted route to MSO VOR/DME, Thence....

....all aircraft climb in MSO VOR/DME holding pattern (hold NW, RT, 147° inbound) to cross MSO VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

APP CRS	Rwy Idg	N/A
163°	TDZE	N/A
	Apt Elev	3642

RNAV (GPS)-A

HAMILTON/ RAVALLI COUNTY (6S5)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Obtain local altimeter setting on CTAF; when not received, procedure NA. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 10000 direct HAMEY WP and right turn via 357° track to MEXUE WP and hold.

AWOS-A	SPOKANE APP CON ★	SALT LAKE CITY CENTER	UNICOM
119.825	124.9 298.95	133.4 285.4	122.8 (CTAF) L

NoPT for arrival on MSO VOR/DME airway radials 239° CW 055°.

MISSOULA MSO

147°
327°
9200
147°
(114.4)

6 NM
003°
8.3
(IAF) MEXUE

(12.1)
6900
183°

ILUGE

(8.2)
5600
169°

(FAF) HAMEY

163°

RW16 3779±

MSA-RW16 25 NM

7646
7030
7215
9587
7370
11400
9351
8886
7723
7820
8160
8468
8320
8127
8656
7104

ELEV 3642

163° to RW16

0.9% UP

4200 X 75

34

MIRL Rwy 16-34 L

10000 | HAMEY | 357° track | MEXUE

ILUGE

HAMEY

6900

169°

3.25°
TCH 32

RW16

163°

5600

Procedure Turn NA

5.7 NM 8.2 NM

CATEGORY	A	B	C	D
CIRCLING	4660-1¼ 1018 (1100-1¼)	4660-1½ 1018 (1100-1½)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
001°	TDZE	N/A
	Apt Elev	3642

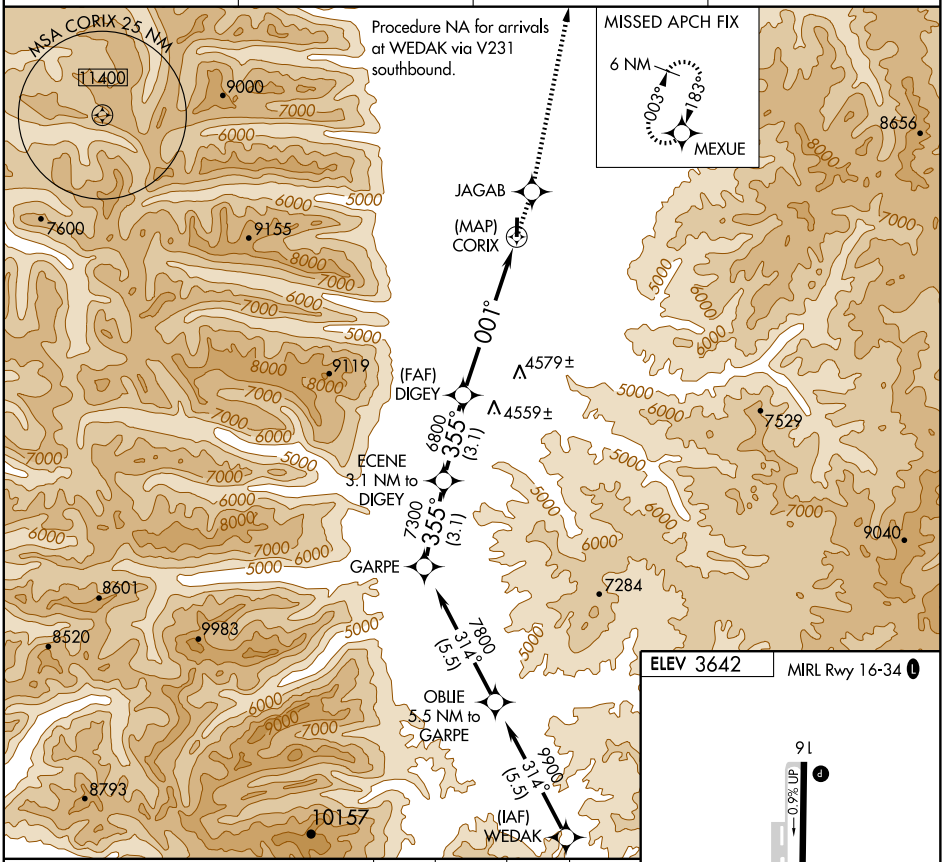
RNAV (GPS)-B

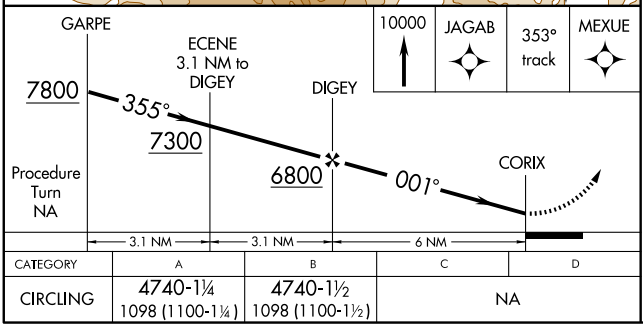
HAMILTON/ RAVALLI COUNTY (6S5)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Obtain local altimeter setting on CTAF; when not received, procedure NA.
Procedure NA at night.

MISSED APPROACH: Climb to 10000 direct JAGAB WP and via 353° track to MEXUE WP and hold.

AWOS-A	SPOKANE APP CON ★	SALT LAKE CITY CENTER	UNICOM
119.825	124.9 298.95	132.4 338.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	4740-1¼ 1098 (1100-1¼)	4740-1½ 1098 (1100-1½)	NA	

ELEV 3642 MIRL Rwy 16-34 L

001° to CORIX

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5205
CH 99316	077°	TDZE	2585
W08A		Apt Elev	2591

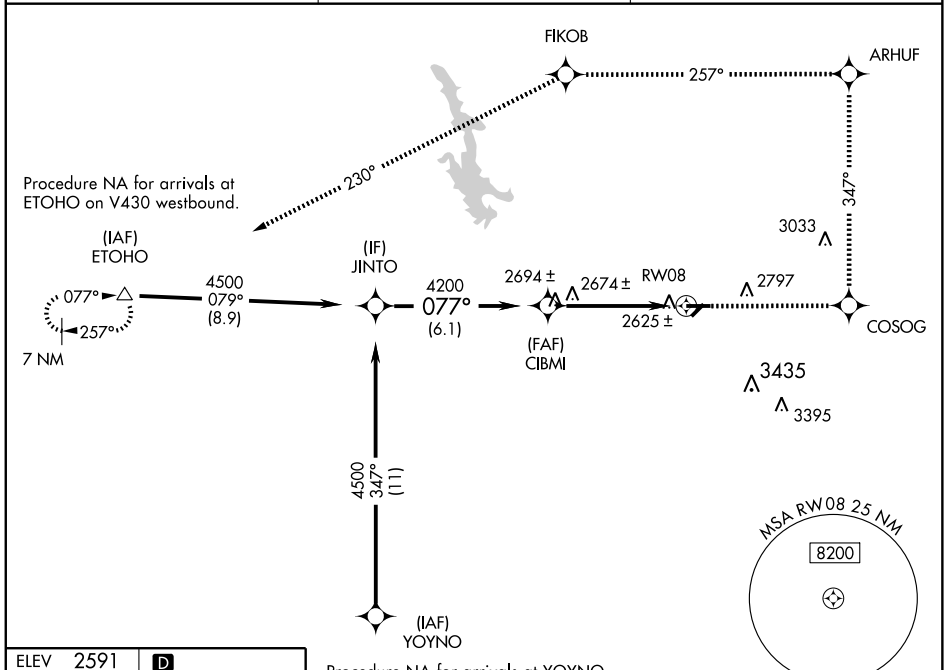
RNAV (GPS) RWY 8

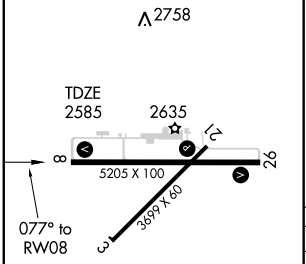
HAVRE CITY-COUNTY (HVR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP- 0.3 NA.

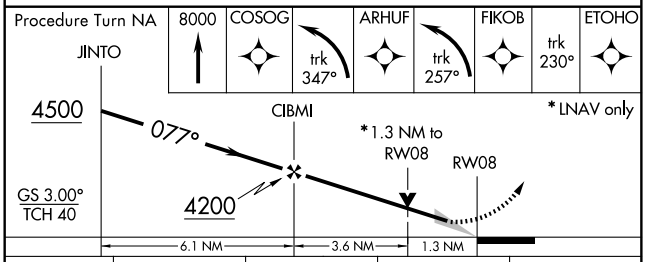
MISSED APPROACH: Climb to 8000 direct COSOG and left turn via track 347° to ARHUF and left turn via track 257° to FIKOB and via track 230° to ETOHO and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L





REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L



CATEGORY	A	B	C	D
LPV DA	2835-1 250 (300-1)			
LNAV/VNAV DA	2906-1¼ 321 (400-1¼)			
LNAV MDA	3020-1 435 (500-1)		3020-1¼ 435 (500-1¼)	3020-1½ 435 (500-1½)
CIRCLING	3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 48816 W26A	APP CRS 257°	Rwy Idg 5205 / TDZE 2586 / Apt Elev 2591

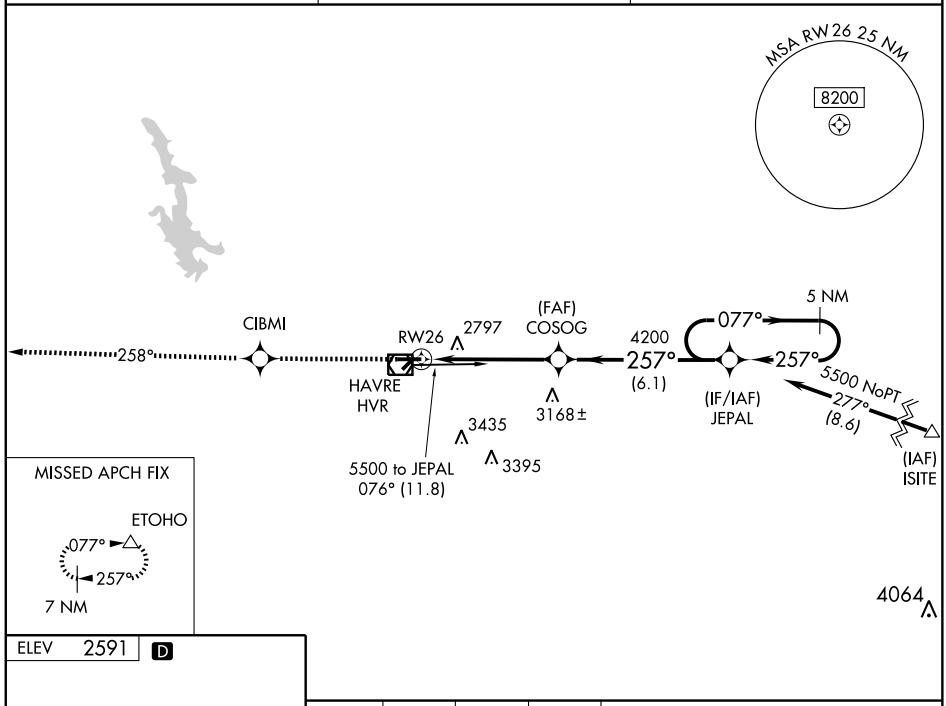
RNAV (GPS) RWY 26

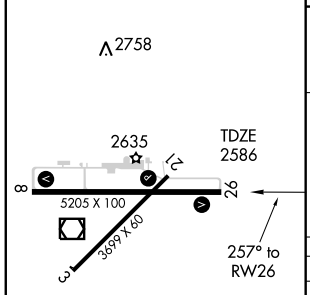
HAVRE CITY-COUNTY (HVR)

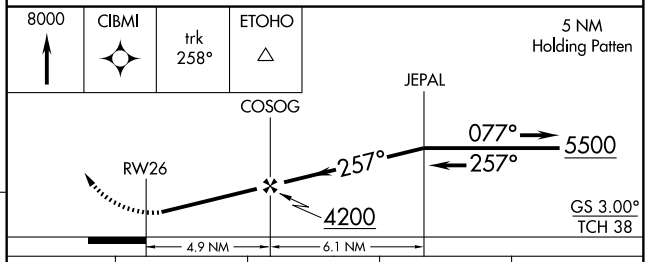
When VGSI inoperative, procedure NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 8000 direct CIBMI and via track 258° to ETOHO and hold, continue climb-in-hold to 8000.

ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2836-1 250 (300-1)			
LNAV/VNAV DA	3097-1¾ 511 (600-1¾)			
LNAV MDA	3060-1 474 (500-1)		3060-1¼ 474 (500-1¼)	3060-1½ 474 (500-1½)
CIRCLING	3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

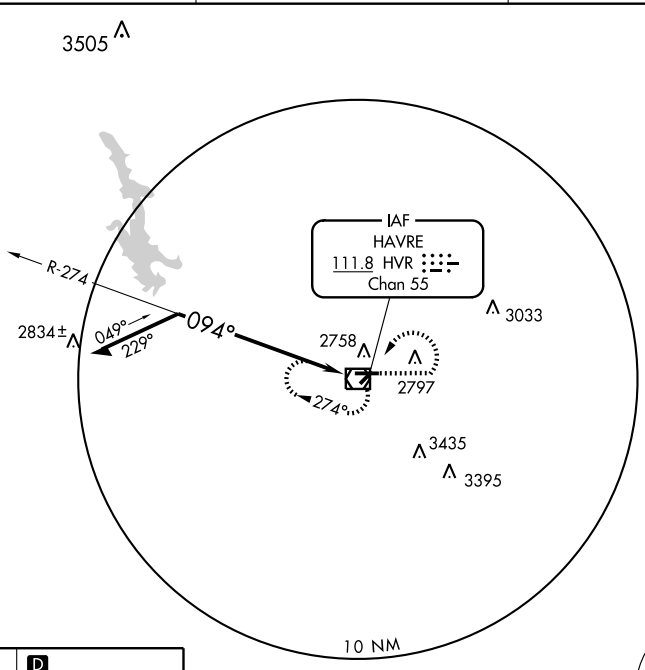
VOR/DME HVR	APP CRS	Rwy Idg	5205
111.8	094°	TDZE	2585
Chan 55		Apt Elev	2591

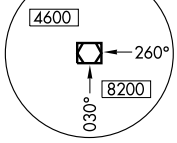
VOR RWY 8

HAVRE CITY-COUNTY (HVR)

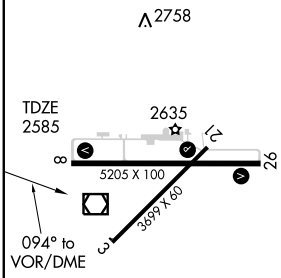
MISSED APPROACH: Climb to 3500 then climbing left turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

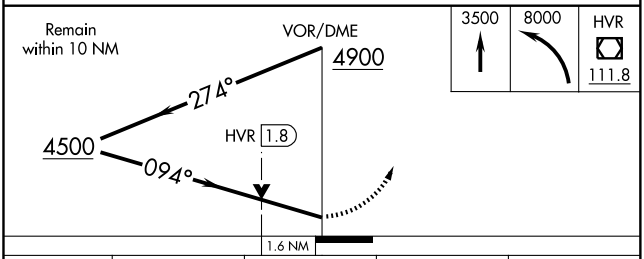
ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L





ELEV 2591 D





CATEGORY	A	B	C	D
S-8	3140-1 555 (600-1)		3140-1½ 555 (600-1½)	3140-1¾ 555 (600-1¾)
CIRCLING	3140-1 549 (600-1)		3140-1½ 549 (600-1½)	3160-2 569 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME HVR	APP CRS	Rwy Idg	5205
111.8	244°	TDZE	2586
Chan 55		Apt Elev	2591

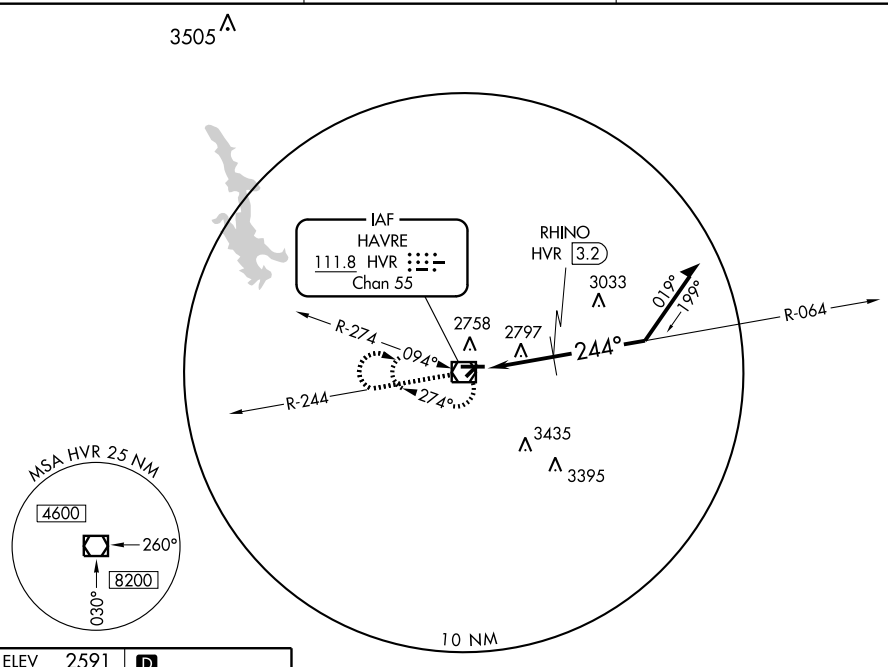
VOR RWY 26

HAVRE CITY-COUNTY (HVR)

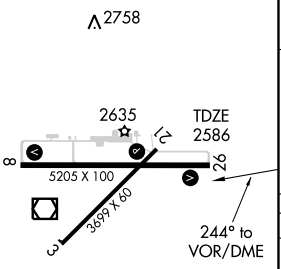
T A Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4500 then climbing right turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

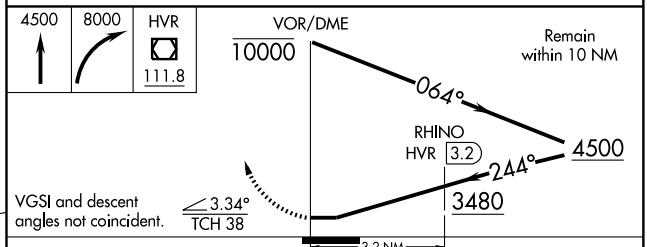
ASOS	GREAT FALLS RADIO	UNICOM
135.225	123.65	122.8 (CTAF) L



ELEV 2591 D

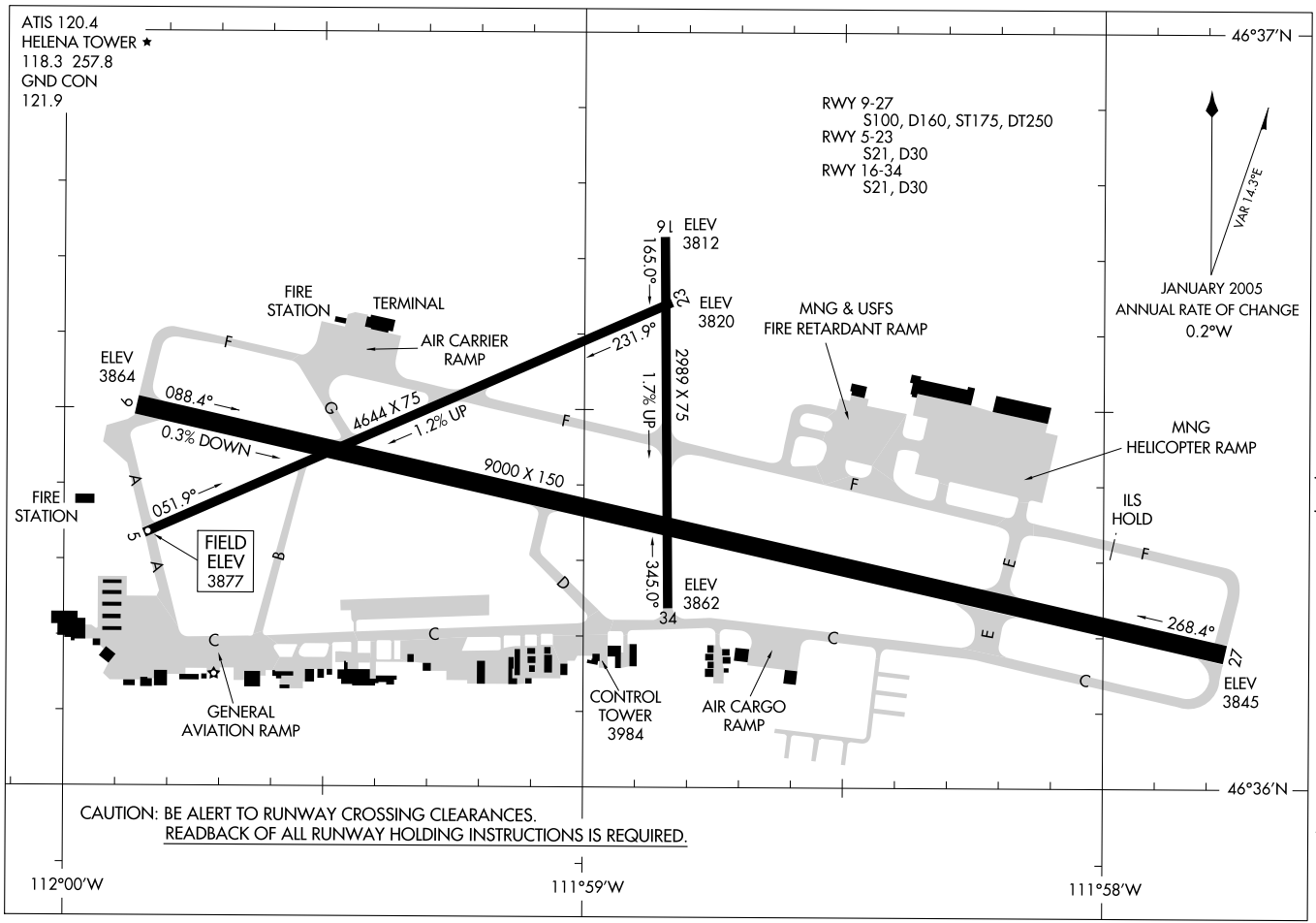


REIL Rwys 8 and 26 L
MIRL Rwys 8-26
MIRL Rwy 3-21 L



CATEGORY	A	B	C	D
S-26	3480-1¼ 894 (900-1¼)		3480-2¾ 894 (900-2¾)	3480-3 894 (900-3)
CIRCLING	3480-1¼ 889 (900-1¼)		3480-2¾ 889 (900-2¾)	3480-3 889 (900-3)
RHINO FIX MINIMUMS				
S-26	3060-1 474 (500-1)		3060-1¼ 474 (500-1¼)	3060-1½ 474 (500-1½)
CIRCLING	3060-1 469 (500-1)	3100-1 509 (600-1)	3100-1½ 509 (600-1½)	3160-2 569 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010


ATIS 120.4
HELENA TOWER ★
118.3 257.8
GND CON
121.9
46°37′N
RWY 9-27
S100, D160, ST175, DT250
RWY 5-23
S21, D30
RWY 16-34
S21, D30
VAR 14.3°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
AIRPORT DIAGRAM
AL-192 (FAA)
HELENA RGNL (HLN)
HELENA, MONTANA
16
ELEV
3812
165.0°
23
ELEV
3820
231.9°
2689 X 75
1.7% UP
FIRE
STATION
TERMINAL
AIR CARRIER
RAMP
ELEV
3864
088.4°
4644 X 75
1.2% UP
0.3% DOWN
9000 X 150
MNG & USFS
FIRE RETARDANT RAMP
MNG
HELICOPTER RAMP
ILS
HOLD
FIRE
STATION
051.9°
FIELD
ELEV
3877
345.0°
ELEV
3862
34
268.4°
27
ELEV
3845
GENERAL
AVIATION RAMP
CONTROL
TOWER
3984
AIR CARGO
RAMP
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
46°36′N
112°00′W
111°59′W
111°58′W

COPTER VOR 251°

VORTAC HLN 117.7 Chan 124	APCH CRS 251°	Rwy Idg N/A TDZE 3848 Arpt Elev 3874

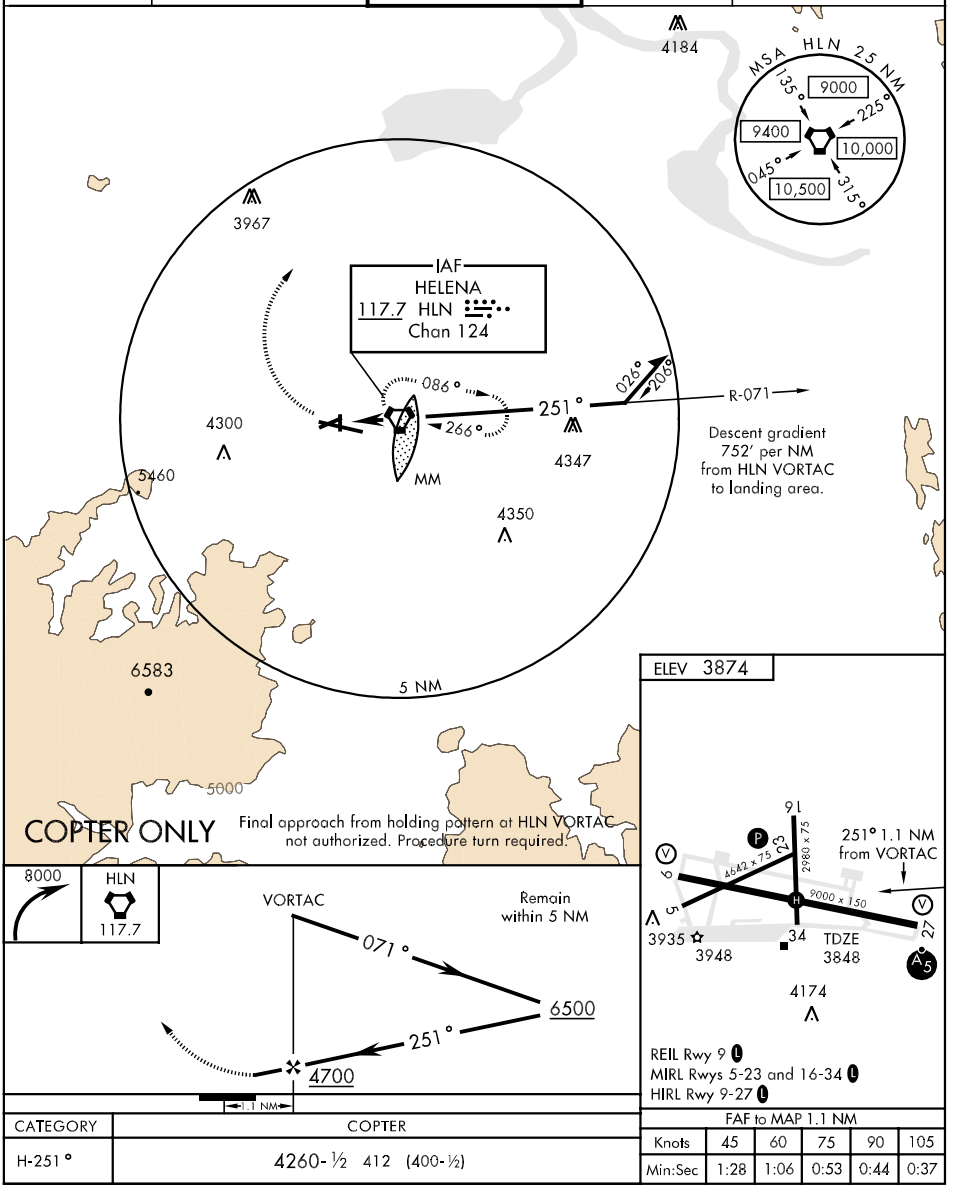
AL-192 [USA]

HELENA REGIONAL (KHLN)

NA when tower clsd.

MISSED APROACH: Climbing right turn to 8000 direct HLN VORTAC and hold.

ATIS ★	HELENA APP CON	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) 257.8	121.9	122.95



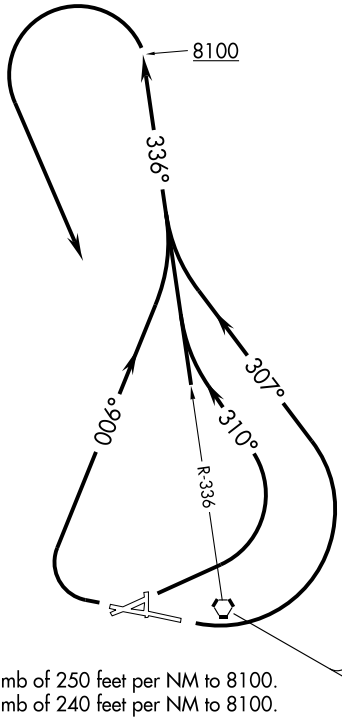
CATEGORY	COPTER
H-251°	4260-½ 412 (400-½)

FAF to MAP 1.1 NM					
Knots	45	60	75	90	105
Min:Sec	1:28	1:06	0:53	0:44	0:37

HELENA THREE DEPARTURE

SL-192 (FAA)

HELENA TOWER ★
118.3 (CTAF) 257.8
HELENA DEP CON ★
119.5 229.4
SALT LAKE CENTER
133.4 285.4



TAKE-OFF MINIMUMS

Rwy 5: Standard with minimum climb of 250 feet per NM to 8100.
Rwy 9: Standard with minimum climb of 240 feet per NM to 8100.
Rwys 16, 23: NA- obstacles.
Rwy 27: Standard with minimum climb of 390 feet per NM to 8100.
Rwy 34: NA- ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 5: Ground beginning 5' from DER, 495' right of centerline, up to 3826' MSL.
Fence beginning 423' from DER, 331' right of centerline, up to 10' AGL/ 3832' MSL.
Rwy 27: Building 1593' from DER, 731' left of centerline, 58'AGL/6385' MSL.
Ground beginning 101' from DER, 346' left of centerline, up to 3871' MSL.
Tree 1567' from DER, 616' left of centerline, 47' AGL/ 3906' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climbing left turn heading 310° to intercept HLN VORTAC R-336 to 8100', then climbing left turn to 9000' via HLN VORTAC R-336 to HLN VORTAC.

TAKE-OFF RUNWAY 9: Climbing left turn heading 307° to intercept HLN VORTAC R-336 to 8100', then climbing left turn to 9000' via HLN VORTAC R-336 to HLN VORTAC.

TAKE-OFF RUNWAY 27: Climbing right turn heading 006° to intercept HLN VORTAC R-336 to 8100', then climbing left turn to 9000' via HLN VORTAC R-336 to HLN VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-HLN	APP CRS	Rwy Idg	9000
110.1	267°	TDZE	3852
		Apt Elev	3877

ILS or LOC Y RWY 27

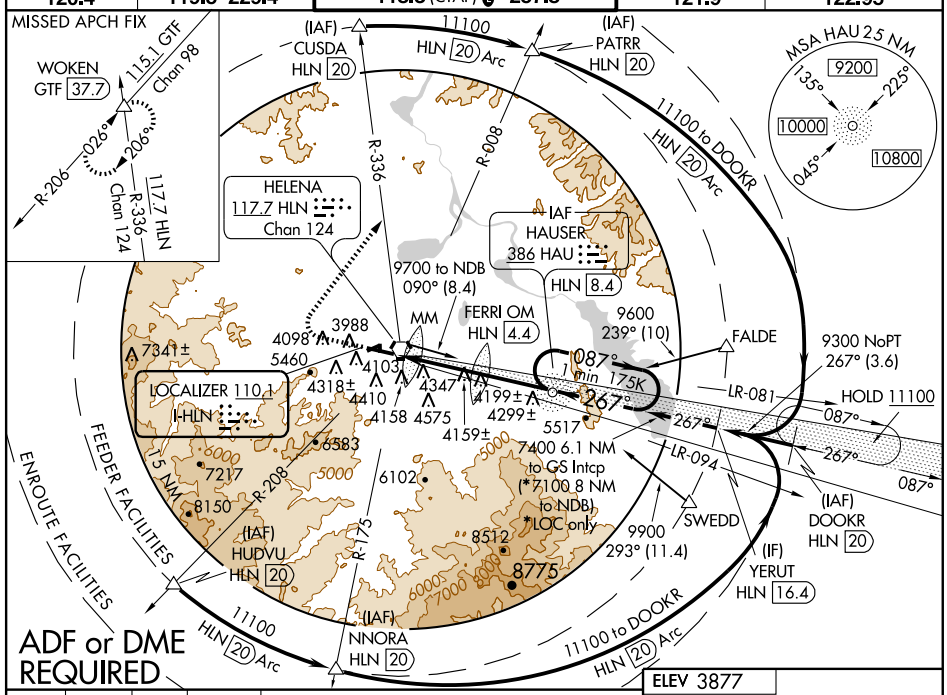
HELENA RGNL (HLN)

Circling NA for Cats. D and E south of Rwy 9-27. Inoperative table does not apply to S-LOC 27 Cats. A-B. For inoperative MALSR, increase S-ILS 27 all Cats. visibility to 2 miles, S-LOC 27 Cat. E visibility to 3 miles, FERRI fix minimums: S-LOC 27 Cat E visibility to 2½ miles. DME arc to final approach required for turbojet aircraft. Holding at HAU NDB authorized for Category A and B aircraft only.

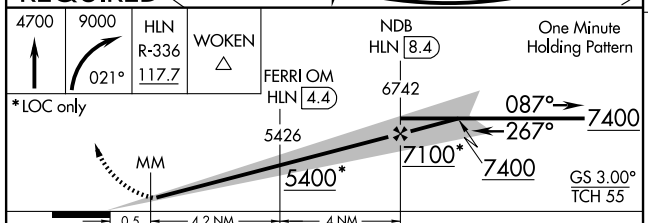
MALSR

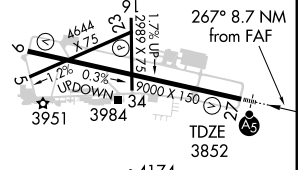
MISSED APPROACH: Climb to 4700 then climbing right turn to 9000 via heading 021° and HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 3877





CATEGORY	A	B	C	D	E
S-ILS 27	4402-1½ 550 (600-1½)				
S-LOC 27	5400-1¼ 1548 (1600-1¼)	5400-1½ 1548 (1600-1½)	5400-2½ 1548 (1600-2½)		
CIRCLING	5400-1¼ 1523 (1600-1¼)	5400-1½ 1523 (1600-1½)	5400-3 1523 (1600-3)		

FERRI FIX MINIMUMS *				
S-LOC 27	4560-½ 708 (700-½)	4560-1½ 708 (700-1½)	4560-1¾ 708 (700-1¾)	4560-2 708 (700-2)
CIRCLING	4640-1 763 (800-1)	4740-2½ 863 (900-2½)	4740-2¾ 863 (900-2¾)	4840-3 963 (1000-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

FAF to MAP 8.7 NM

Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-HLN	APP CRS	Rwy Idg	9000
110.1	267°	TDZE	3852
		Apt Elev	3877

ILS or LOC Z RWY 27

HELENA RGNL (HLN)

Circling NA for Cats. D and E south of Rwy 9-27. DME Arc to final approach required for turbojet aircraft. Holding at HAU NDB authorized for Category A and B aircraft only. Inoperative table does not apply to S-LOC 27 Cats. A-B. For inoperative MALSR, increase S-LOC 27 Cat. E visibility to 3 miles, FERRI fix minimums: S-LOC 27 Cat E visibility to 3 miles.

MALSR

MISSED APPROACH: Climb to 4400 then climbing right turn to 9000 via heading 021° and HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

MISSED APCH FIX

WOKEN GTF 37.7

115.1 GTF Chan 98

117.7 HLN Chan 124

R-206 026° 206° R-336

Missed approach obstructions require a minimum climb gradient of 320 feet/NM. If unable to meet rate of climb, see ILS or LOC Y RWY 27.

(IAF) CUSDA HLN 20

(IAF) PATRR HLN 20

11100 HLN 20 Arc

11100 to DOOKR HLN 20 Arc

MSA HAU 25 NM
135° 9200 225°
10000
045° 10800

HELENA 117.7 HLN Chan 124

R-336 R-008

IAF HAUSER 386 HAU

HLN 8.4

9700 to NDB 090° (8.4)

9600 239° (10)

FALDE

9300 NoPT 267° (3.6)

HOLD 11100 087° 267°

LR-081

LR-094

LOCALIZER 110.1 I-HLN

MM

FERRI OM HLN 4.4

087° 1 min 175K 267°

3988 4098 5460 7341± 4103 4318± 4410 4158 4575 4347 4199± 4299± 4159± 5517 6583 7217 8150 6102 8512 8775

5000 6000 7000

7400 6.1 NM to GS Intcp (*7100 8 NM to NDB) *LOC only

9900 293° (11.4)

SWEDD

(IAF) DOOKR HLN 20

(IF) YERUT HLN 16.4

(IAF) HUDVU HLN 20

(IAF) NNORA HLN 20

R-208 R-175 115 NM

ENROUTE FACILITIES FEEDER FACILITIES

ADF or DME REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

ELEV 3877

4400 9000 021° HLN R-336 117.7 WOKEN

*LOC only

NDB HLN 8.4

One Minute Holding Pattern

FERRI OM HLN 4.4

6742 5426 087° 267° 7400 7100* 7400 5400* MM

GS 3.00° TCH 55

0.5 4.2 NM 4 NM

CATEGORY	A	B	C	D	E
S-ILS 27	4052-½ 200 (200-½)				
S-LOC 27	5400-1¼ 1548 (1600-1¼)	5400-1½ 1548 (1600-1½)	5400-2½ 1548 (1600-2½)		
CIRCLING	5400-1¼ 1523 (1600-1¼)	5400-1½ 1523 (1600-1½)	5400-3 1523 (1600-3)		

FERRI FIX MINIMUMS *

S-LOC 27	4420-½ 568 (600-½)		4420-1 568 (600-1)	4420-1¼ 568 (600-1¼)	4420-1½ 568 (600-1½)
CIRCLING	4640-1 763 (800-1)	4640-1¼ 763 (800-1¼)	4740-2½ 863 (900-2½)	4740-2¾ 863 (900-2¾)	4840-3 963 (1000-3)

REIL Rwy 9 L

MIRL Rwys 5-23 and 16-34 L

HIRL Rwy 9-27 L

FAF to MAP 8.7 NM

Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

LOC I-HLN	APP CRS	Rwy Idg	N/A
110.1	087°	TDZE	N/A
		Apt Elev	3877

LOC/DME BC-C
HELENA RGNL (HLN)

DME from HLN VORTAC, simultaneous reception of I-HLN and HLN DME required.
Circling NA south of Rwy 9-27 for Cat D.

MISSED APPROACH: Climbing left turn to 9000 via HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

ALTERNATE MISSED APCH FIX
086° 266° R-086
HELENA HLN 117.7 Chan 124

BACK COURSE

(IAF) USOBE HLN 13

MISSED APCH FIX
WOKEN GTF 37.7
115.1 GTF Chan 98
026° 206° R-206 R-336 117.7 HLN Chan 124

10 NM
9000 HLN 13 Arc
R-336

LOCALIZER 110.1 I-HLN

HELENA 117.7 HLN Chan 124

8330
R-266
(IAF) RICHD HLN 19.7
267° 086° 266°
HOLD 9800
(EVAGE)
9000 to LIKVE 131° (0.3) and LOC (6.5)
7505 (IF) LIKVE HLN 13
LR-275
UPUGE HLN 9
MUSEW HLN 7
SAKPE HLN 2.5
7800
087° (4)
4219±
6991
LR-256
7341±
7200 087° (2)
4779± 4098 3988
4103 4318± 4410
4347 4158 4575
5460
HLN 13 Arc 9000
6626±
VOCSU HLN 13
R-228
7000
7217
6583
R-208
HLN 13 Arc 9700
8150
6102
R-175
(IAF) UGACE HLN 13
HLN 13 Arc 10800
(IAF) ICADU HLN 13
8512
8775

MSA HLN 25 NM
135° 225° 045° 315°
9200
9600 10200
10700

ELEV 3877
4644 X 75
2989 X 75
1.7% UP
2% 0.3% UPDOWN
9000 X 150
3951 3984
34
Δ4174

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

LIKVE HLN 13
Disregard glide slope indications.
9000 HLN R-336
WOKEN
UPUGE HLN 9
MUSEW HLN 7
SAKPE HLN 2.5
9000
087°
7800
7200
Procedure Turn NA
4 NM 2 NM 4.5 NM

CATEGORY	A	B	C	D
CIRCLING	5140-1¼ 1263 (1300-1¼)	5140-1½ 1263 (1300-1½)	5140-3	1263 (1300-3)

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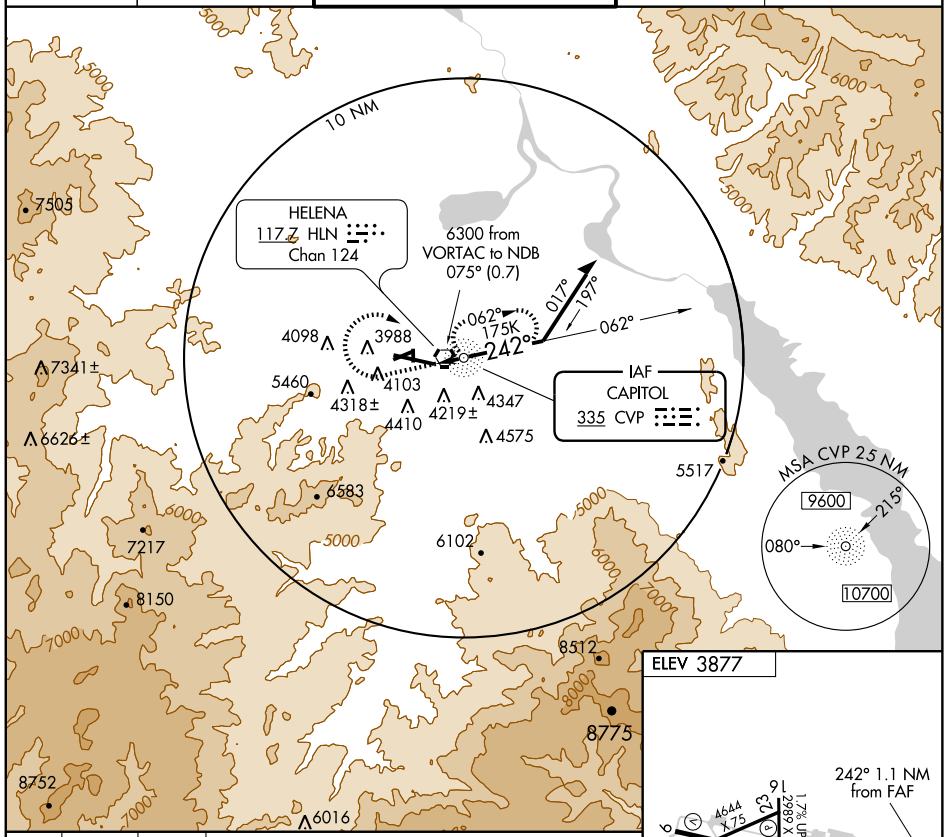
NDB CVP	APP CRS	Rwy Idg	N/A
335	242°	TDZE	N/A
		Apt Elev	3877

NDB-D

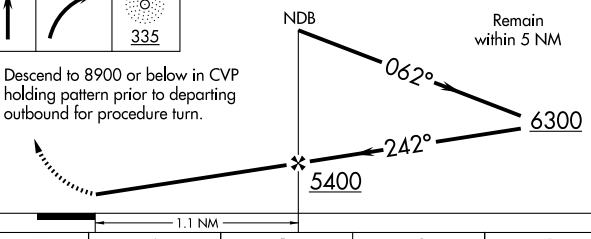
HELENA RGNL (HLN)

MISSED APPROACH: Climb to 5200, then climbing right turn to 6400 direct CVP NDB and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



5200	6400	CVP
		335



Descend to 8900 or below in CVP holding pattern prior to departing outbound for procedure turn.

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
CIRCLING	4980-1¼ 1103 (1200-1¼)	NA		

FAF to MAP 1.1 NM					
Knots	60	90	120	150	180
Min:Sec	1:06	0:44	0:33	0:26	0:22

APP CRS	Rwy Idg	4644
245°	TDZE	3850
	Apt Elev	3877

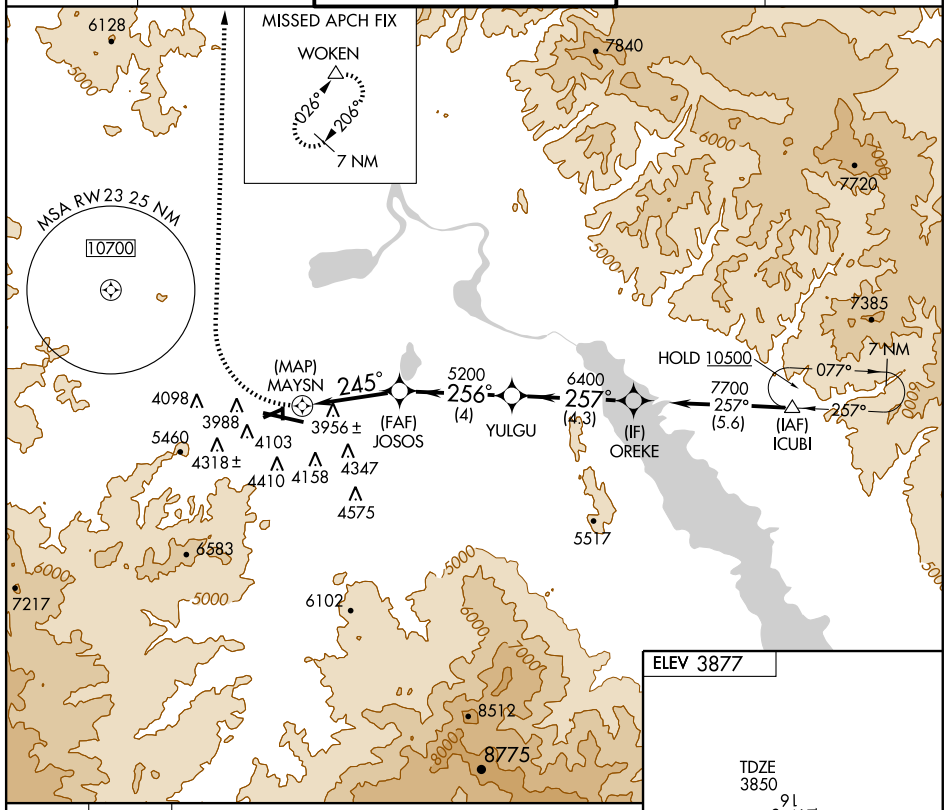
RNAV (GPS) RWY 23

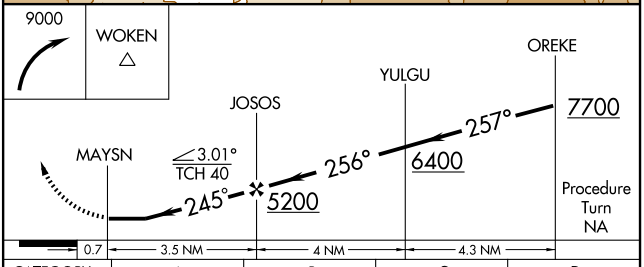
HELENA RGNL (HLN)

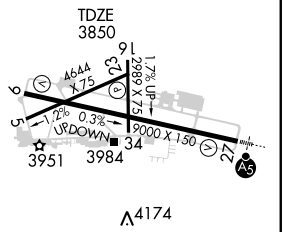
T Circling NA for Cat D south of Rwy 9/27.
A Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing right turn to 9000 direct WOKEN and hold, continue climb-in-hold to 9000.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
LNAV MDA	4760-1¼ 910 (900-1¼)		4760-2¾ 910 (900-2¾)	4760-3 910 (900-3)
CIRCLING	4760-1¼ 883 (900-1¼)		4760-2¾ 883 (900-2¾)	4760-3 883 (900-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9000
CH 69405	267°	TDZE	3852
W27A		Apt Elev	3877

RNAV (GPS) X RWY 27

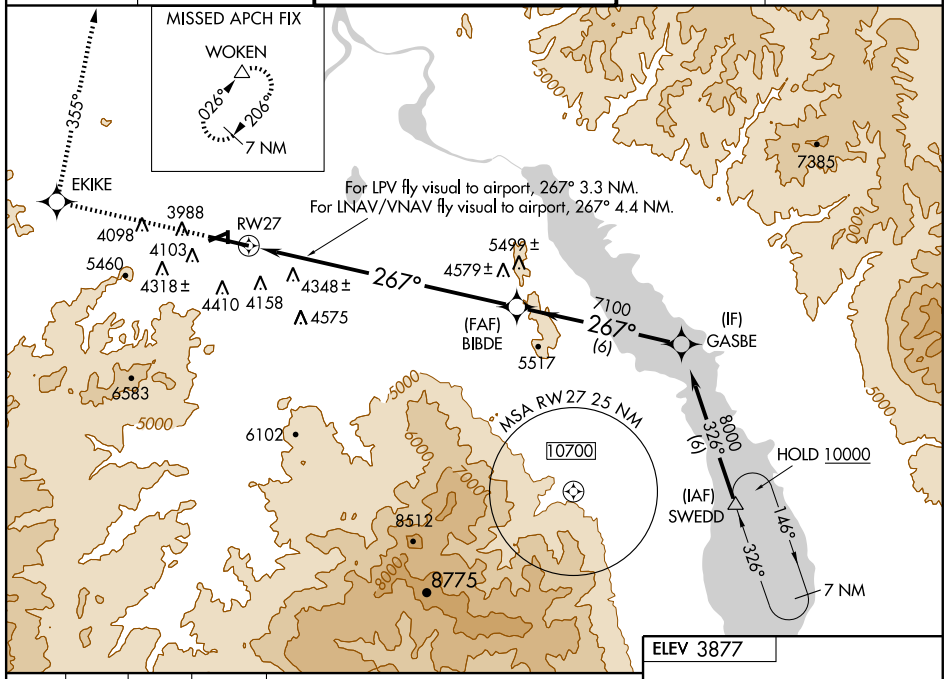
HELENA RGNL (HLN)

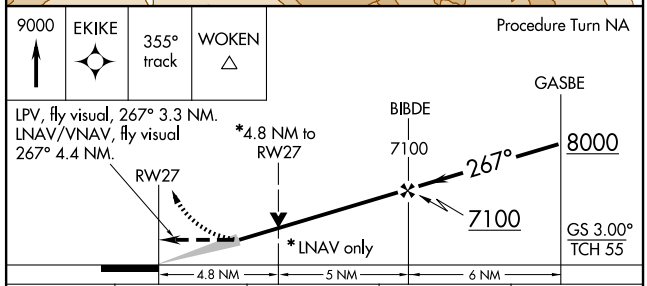
T Circling NA for Cat D south of Rwy 9-27.
A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 42°C (107°F). DME/DME RNP- 0.3 NA. Inoperative table does not apply to LNAV Cats A-B.

MALSR

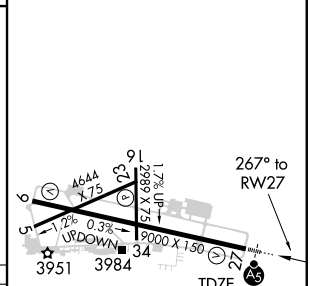
MISSED APPROACH: Climb to 9000 direct EKIKE and via 355° track to WOKEN and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	4965-2 1113 (1100-2)		4965-3 1113 (1100-3)	
LNAV/VNAV DA	5289-2 1437 (1500-2)		5289-3 1437 (1500-3)	
LNAV MDA	5440-1¼ 1588 (1600-1¼)	5440-1½ 1588 (1600-1½)	5440-2½ 1588 (1600-2½)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	



REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9000
087°	TDZE	3864
	Apt Elev	3877

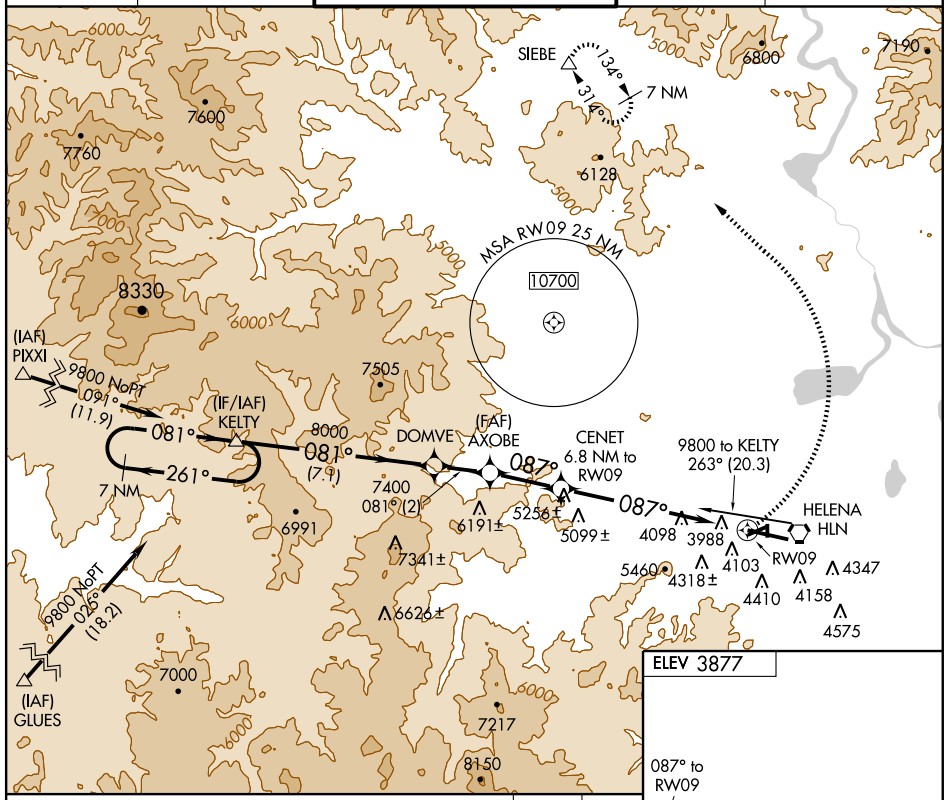
RNAV (GPS) Y RWY 9

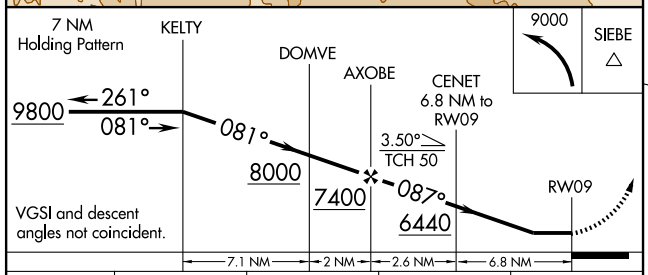
HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.
DME/DME RNP- 0.3 NA.
Visibilty reduction by helicopters NA.

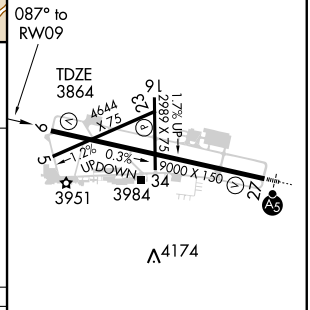
MISSED APPROACH: Climbing left turn to 9000 direct SIEBE and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LNAV MDA	5440-1¼ 1576 (1600-1¼)	5440-1½ 1576 (1600-1½)	5440-3 1576 (1600-3)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	



REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9000
267°	TDZE	3852
	Apt Elev	3877

RNAV (RNP) Y RWY 27

HELENA RGNL (HLN)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). For inoperative MALSR, increase RNP 0.22* visibility to 1, and RNP 0.30** visibility to 1½ . Missed approach requires RNP less than 1.0. *Missed approach requires minimum climb of 290 feet per NM to 7700. **Missed approach requires minimum climb of 270 feet per NM to 7600; if unable, see RNAV (RNP) Z RWY 27.

MALSR

MISSED APPROACH: Climb to 13000 via 267° track to SAKPE, and via 267° track to MUSEW, and via 261° track to KELTY, and via 271° track to PIXXI and hold, continue climb-in-hold to 13000.

ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrivals on HLN VORTAC airway radials 276 CW 185 and for arrivals on HLN VORTAC airway radials 009 CW 265 and for arrivals at SUZZY via V343 westbound.

MISSED APCH FIX

ELEV 3877

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
RNP 0.22 DA*	4133-½ 281 (300-½)			
RNP 0.30 DA**	4287-1 435 (500-1)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9000
087°	TDZE	3864
	Apt Elev	3877

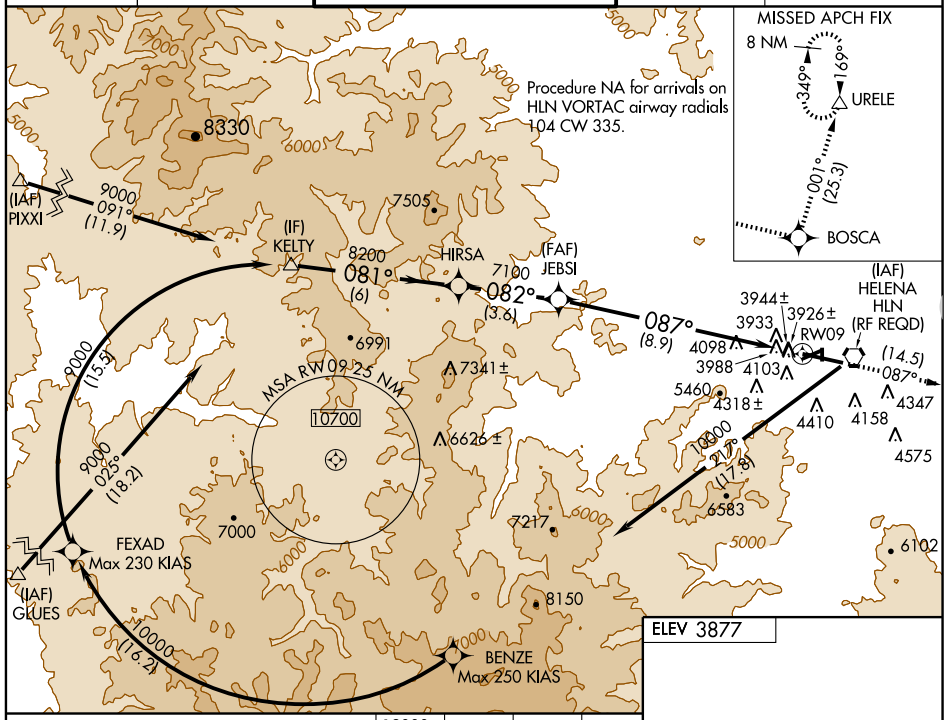
RNAV (RNP) Z RWY 9

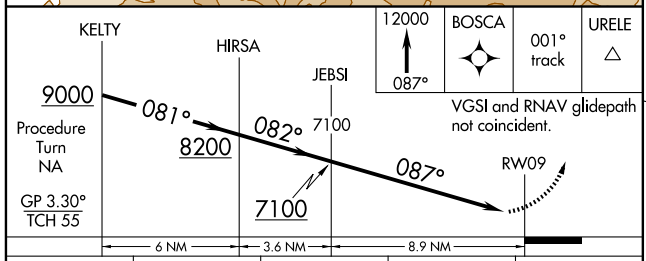
HELENA RGNL (HLN)

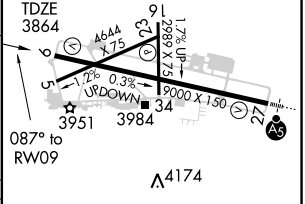
GPS required.
For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 54°C (130°F).
When VGSI inoperative, procedure NA at night.
*Missed approach requires minimum climb of 260′ per NM to 4300.

MISSED APPROACH: Climb to 12000 via 087° track to BOSCA and via 001° track to URELE and hold, continue climb-in-hold to 12000.

ATIS	HELENA APP CON *	HELENA TOWER *	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
RNP 0.11 DA*	4220-1	356 (400-1)		NA
RNP 0.17 DA	4258-1¼	394 (400-1¼)		NA
RNP 0.30 DA	4353-1½	489 (500-1½)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9000
267°	TDZE	3852
	Apt Elev	3877

RNAV (RNP) Z RWY 27

HELENA RGNL (HLN)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). *Missed approach requires minimum climb of 295 feet per NM to 7900. **Missed approach requires minimum climb of 290 feet per NM to 7300. ***Missed approach requires minimum climb of 405 feet per NM to 6300. For inoperative MALSR, increase RNP 0.18* visibility to 1, RNP 0.22** visibility to 1¼ , and RNP 0.30*** visibility to 1½. Inoperative table does not apply to RNP 0.30.

MALSR

MISSED APPROACH: Climb to 13000 via 267° track to JEBSI, and via 261° track to KELTY, and via 271° track to PIXXI and hold, continue climb-in-hold to 13000.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrivals on HIA VORTAC airway radials 276 CW 185 and for arrivals on HLN VORTAC airway radials 009 CW 265 and for arrivals at SUZZY via V343 westbound.

(RF REQD) (RNP 0.50) (IAF) HELENA HLN

(IAF) URELE (RNP 0.50)

(IAF) LINGE (RNP 0.50)

(IAF) HEXOL (RNP 0.50)

(FAF) JEXUT

FALDE Max 240 KIAS via URELE

(IF) BOSCA

(IAF) SWEDD (RNP 0.50)

CEMLI

MISSED APCH FIX

PIXXI 086° 266° 8 NM

KELTY 271° (11.9)

JEBSI 261° (9.6)

DULCA Max 230 KIAS

FAVTA Max 230 KIAS

MSA RW27 25 NM 10700

WHITEHALL HIA (RF REQD) (RNP 0.50)

(IAF) SUZZY (RF REQD) (RNP 0.50)

ELEV 3877

TDZE 3852

RW27

REIL Rwy 9 L

MIRL Rwys 5-23 and 16-34 L

HIRL Rwy 9-27 L

267° to RW27

13000 267° | JEBSI | 261° track | KELTY

JEXUT 6500 267° 7200 BOSCA

RW27 6500

Procedure Turn NA

GP 3.00° TCH 55

8 NM 5 NM

CATEGORY	A	B	C	D
RNP 0.18 DA*	4119-½ 267 (300-½)			
RNP 0.22 DA**	4212-¾ 360 (400-¾)			
RNP 0.30 DA***	4287-1 435 (500-1)			
RNP 0.30 DA	4863-4 1011 (1000-4)			

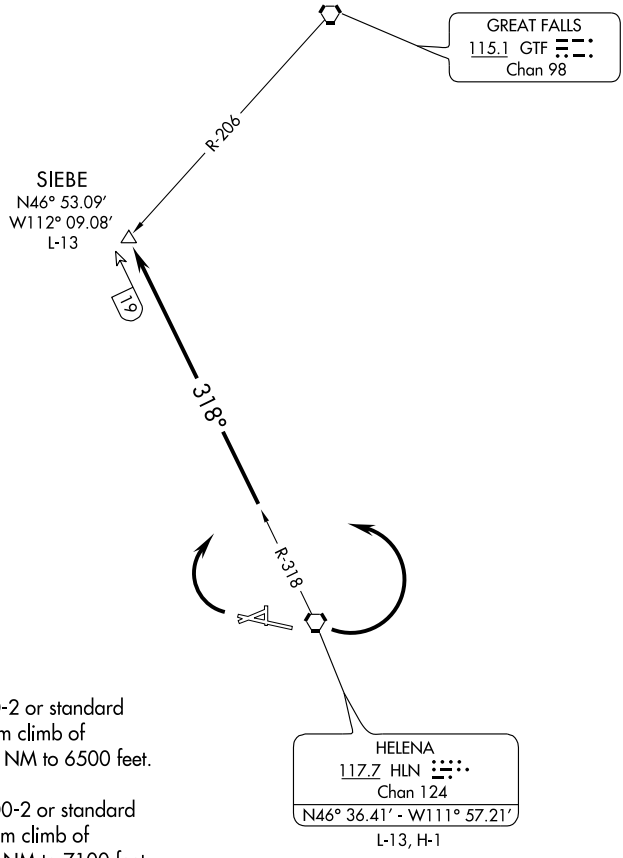
SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SIEBE TWO DEPARTURE

SL-192 (FAA)

ATIS 120.4
GND CON
121.9
HELENA TOWER★
118.3 (CTAF) 257.8
HELENA DEP CON★
119.5 229.4



NOTE: Rwy 9, 1500-2 or standard with minimum climb of 360 feet per NM to 6500 feet.

NOTE: Rwy 27, 2400-2 or standard with minumum climb of 355 feet per NM to 7100 feet.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn, thence. . . .

TAKE-OFF RUNWAY 27: Climbing right turn, thence. . . .

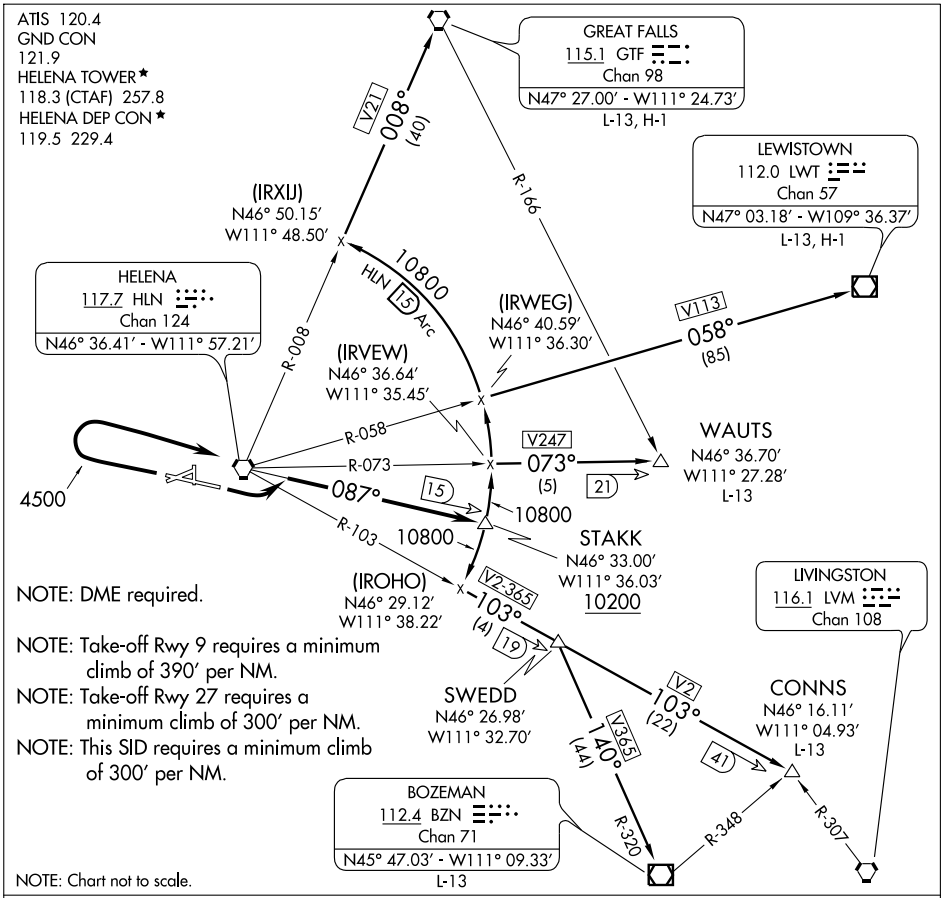
. . . .Intercept HLN R-318 to SIEBE INT.

(STAKK2.STAKK) 09239

STAKK TWO DEPARTURE

SL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn to intercept HLN R-087 to cross STAKK INT at or above 10,200'. Thence via transition.

TAKE-OFF RUNWAY 27: Climb on runway heading to 4500' then climbing right turn direct HLN VORTAC. Continue climb on HLN R-087 to cross STAKK INT at or above 10,200'. Thence via transition.

BOZEMAN TRANSITION (STAKK2.BZN): From over STAKK INT via 15 DME Arc and V365 to BZN VOR/DME.

CONNS TRANSITION (STAKK2.CONNS): From over STAKK INT via 15 DME Arc and V2 to CONNS INT.

GREAT FALLS TRANSITION (STAKK2.GTF): From over STAKK INT via 15 DME Arc and V21 to GTF VORTAC.

LEWISTOWN TRANSITION (STAKK2.LWT): From over STAKK INT via 15 DME Arc and V113 to LWT VORTAC.

WAUTS TRANSITION (STAKK2.WAUTS): From over STAKK INT via 15 DME Arc and V247 to WAUTS INT.

NW-1, 14 JAN 2010 to 11 FEB 2010

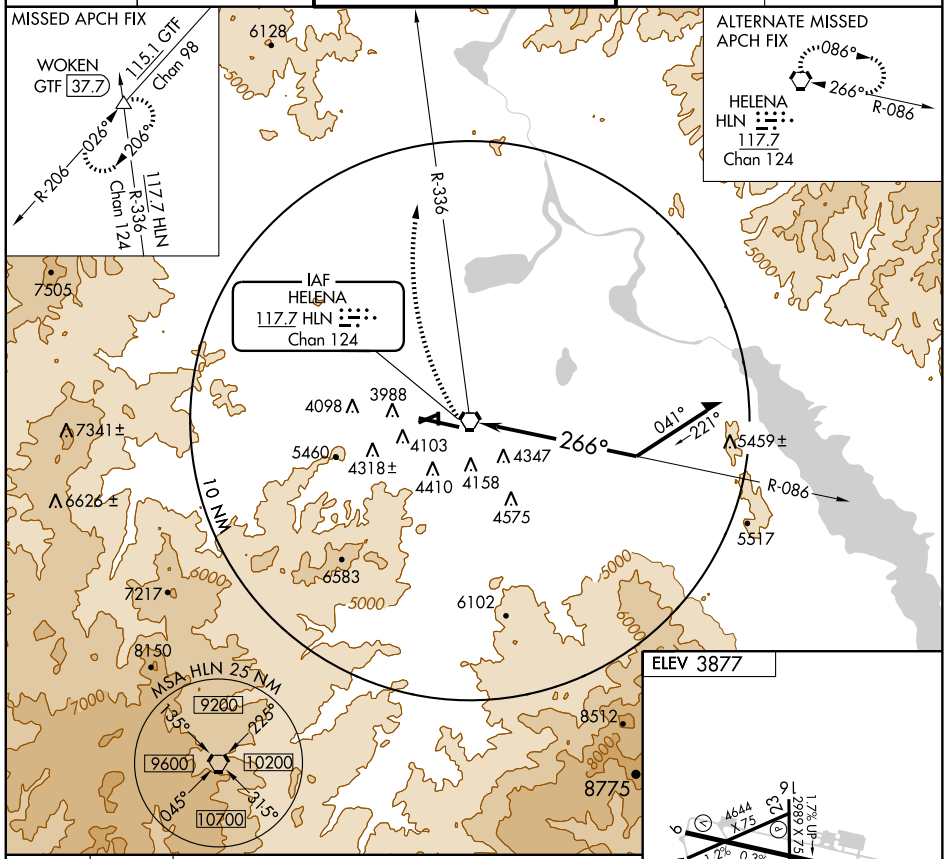
VORTAC HLN 117.7 Chan 124	APP CRS 266°	Rwy Idg N/A TDZE N/A Apt Elev 3877

VOR-A
HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.

MISSED APPROACH: Climbing right turn to 9000 via HLN VORTAC R-336 to WOKEN INT and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



9000
HLN
R-336

WOKEN

Procedure Turn: Descend to 10000 in HLN VORTAC holding pattern prior to departing outbound for procedure turn.

VORTAC
086°
266°
8200
Remain within 10 NM

CATEGORY	A	B	C	D
CIRCLING	6700-1¼ 2823 (2900-1¼)	6700-1½ 2823 (2900-1½)	6700-3 2823 (2900-3)	

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC HLN	APP CRS	Rwy Idg	N/A
117.7	266°	TDZE	N/A
Chan 124		Apt Elev	3877

VOR/DME-B
HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.
DME Arc to final approach course required for turbojet aircraft.
Holding at SEWAL authorized for Cat A and B aircraft only.

MISSED APPROACH: Climbing right turn to 9000 via HLN VORTAC R-336 to WOKEN INT/22.7 DME and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

MISSED APCH FIX
WOKEN
HLN 22.7
026°
208°
115.1 GTF
R-206
Chan 98
117.7 HLN
R-336
Chan 124

ALTERNATE MISSED APCH FIX
086°
266°
R-086
HELENA
HLN
117.7
Chan 124

(IAF) KOTLE HLN 15
10000
HLN 15 Arc
(IAF) TICUS HLN 15
7840
R-336
R-008
10 NM
HELENA
117.7 HLN
Chan 124
MSA HLN 25 NM
9200
9600
10200
10700
7720
(IAF) HONVI HLN 15
7385
R-058
(IAF) FAVOX HLN 15
R-073
8400 MoPT HLN 15 Arc
LR-078
(IF) JOVIX HLN 15
R-086
LR-094
8400 NoPT HLN 15 Arc
(IAF) CUSRI HLN 15
R-103
R-124
10000 HLN 15 Arc
8512
8775
HUDUB HLN 15
11100 HLN 15 Arc
(IAF) LOCIS HLN 15
(IAF) JEVAM HLN 15
R-175
R-208
7217
6583
6102
5517
7300
266° (6.6)
(IAF) SEWAL HLN 8.4
8300 to SEWAL
086° (8.4)
4575
4410
4158
4348±
4174
4103
4318±
5460
4098
3988
JUBTI HLN 4
4979±
086°
1 min 175K
266°

ELEV 3877
9
4644 X 75
1.7% UP
2989 X 75
33
27
5
1.2% DOWN
0.3%
9000 X 150
34
3951
3984
A5
4174

9000
HLN
R-336
WOKEN
SEWAL
HLN 8.4
One Minute Holding Pattern
JUBTI
HLN 4
086°
266°
7300
VORTAC
266°
5420
4 NM
4.4 NM

CATEGORY	A	B	C	D
CIRCLING	4760-1¼ 883 (900-1¼)		4760-2¾ 883 (900-2¾)	4760-3 883 (900-3)

REIL Rwy 9 L
MIRL Rwys 5-23 and 16-34 L
HIRL Rwy 9-27 L

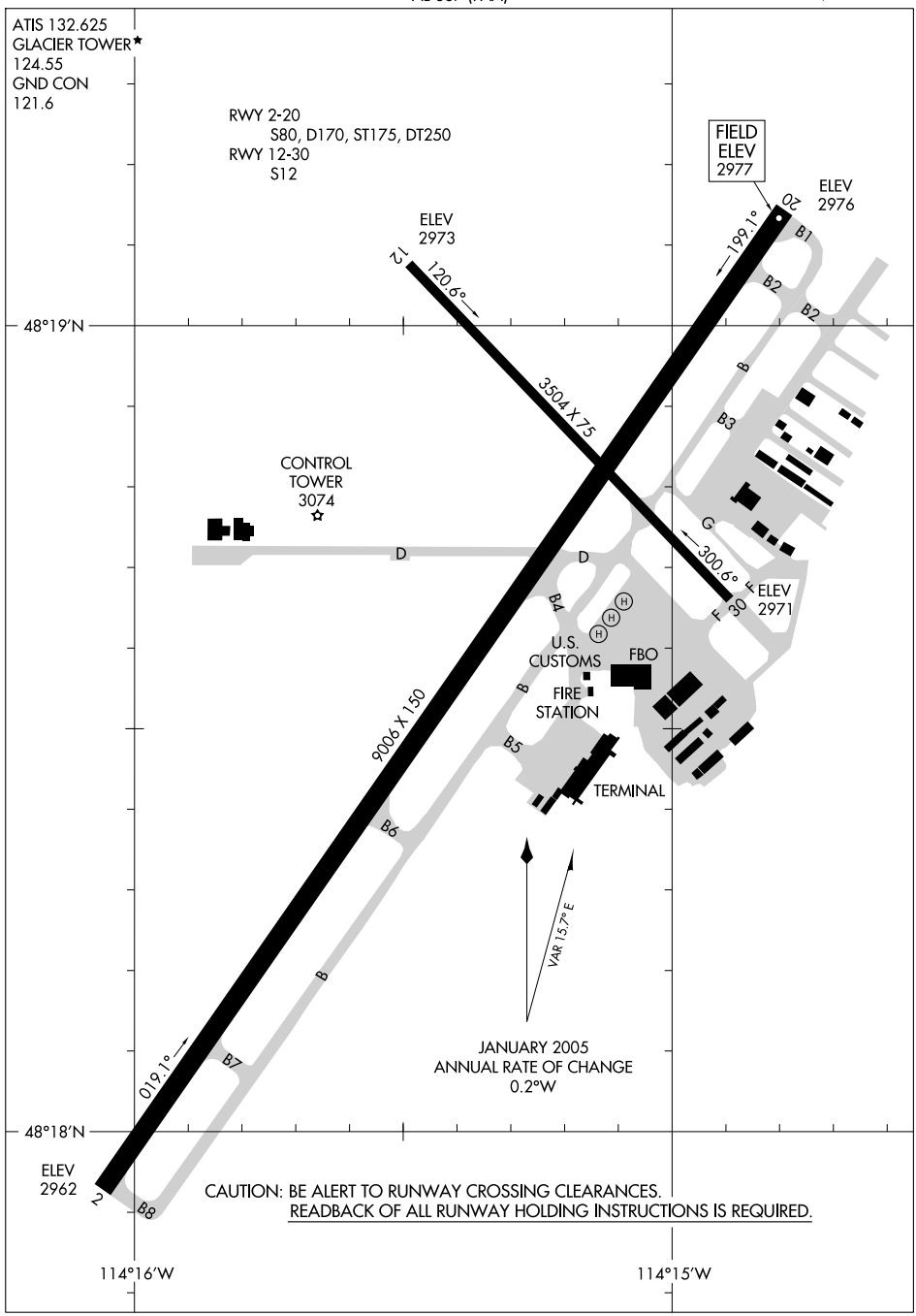
NW-1, 14 JAN 2010 to 11 FEB 2010

07354

AIRPORT DIAGRAM

AL-887 (FAA)

KALISPELL/GLACIER PARK INTL (GPI)
KALISPELL, MONTANA



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-GPI	APP CRS	Rwy Idg	9006
111.5	020°	TDZE	2966
		Apt Elev	2977

ILS or LOC RWY 2

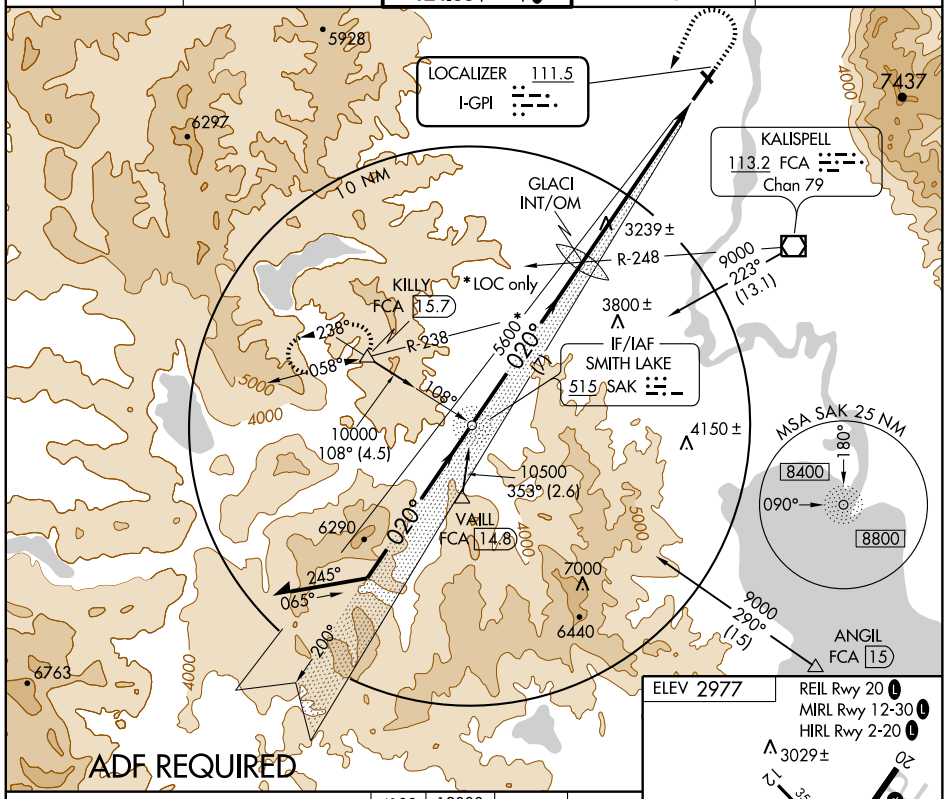
KALISPELL/ GLACIER PARK INTL (GPI)

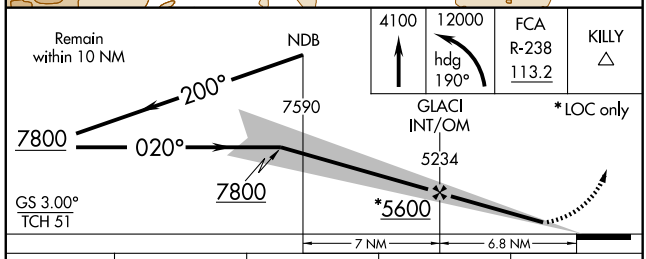
ADF required.

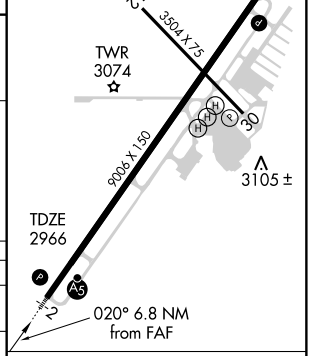
MALSR

MISSED APPROACH: Climb to 4100, then climbing left turn to 12000 via heading 190° and via FCA VOR/DME R-238 to KILLY INT/FCA 15.7 DME and hold, continue climb-in-hold to 12000.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
S-ILS 2	3166-½ 200 (200-½)			
S-LOC 2	3540-½ 574 (600-½)		3540-1 574 (600-1)	3540-1¼ 574 (600-1¼)
CIRCLING	3540-1 563 (600-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

FAF to MAP 6.8 NM

Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	3504
301°	TDZE	2974
	Apt Elev	2977

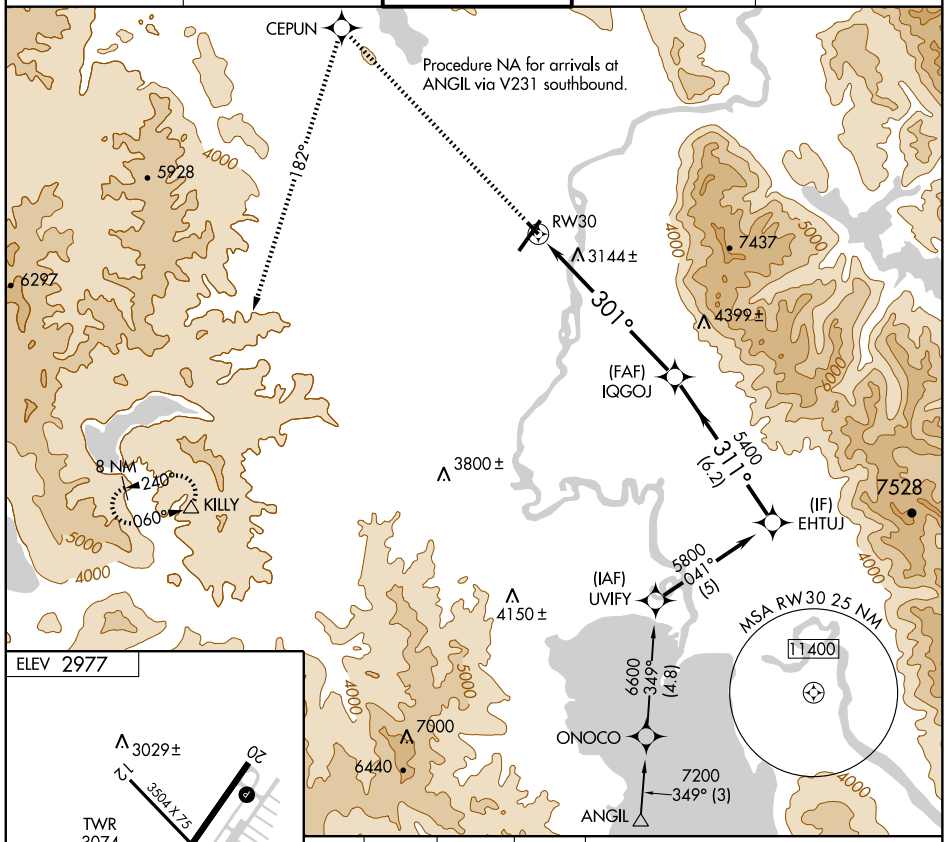
RNAV (GPS) RWY 30

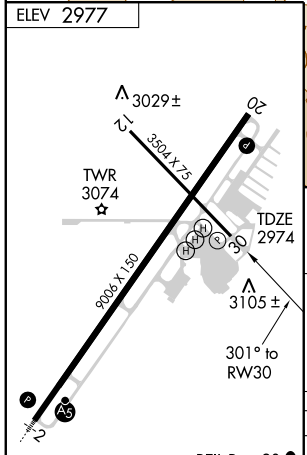
KALISPELL/ GLACIER PARK INTL (GPI)

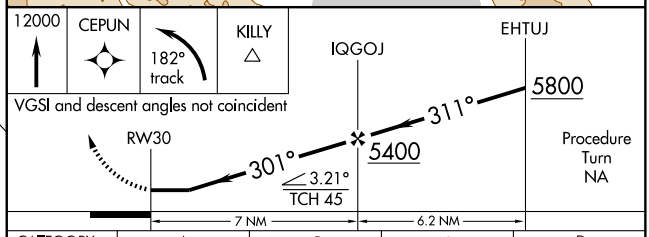
Straight-in minimums NA at night.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 12000 direct CEPUN and left turn via track 182° to KILLY and hold, continue climb-in-hold to 12000.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
LNAV MDA	3460-1	486 (500-1)	3460-1¼ 486 (500-1¼)	3460-1½ 486 (500-1½)
CIRCLING	3520-1	543 (600-1)	3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 70799 W02A	APP CRS 020°	Rwy Idg 9006 TDZE 2966 Apt Elev 2977

RNAV (GPS) Z RWY 2

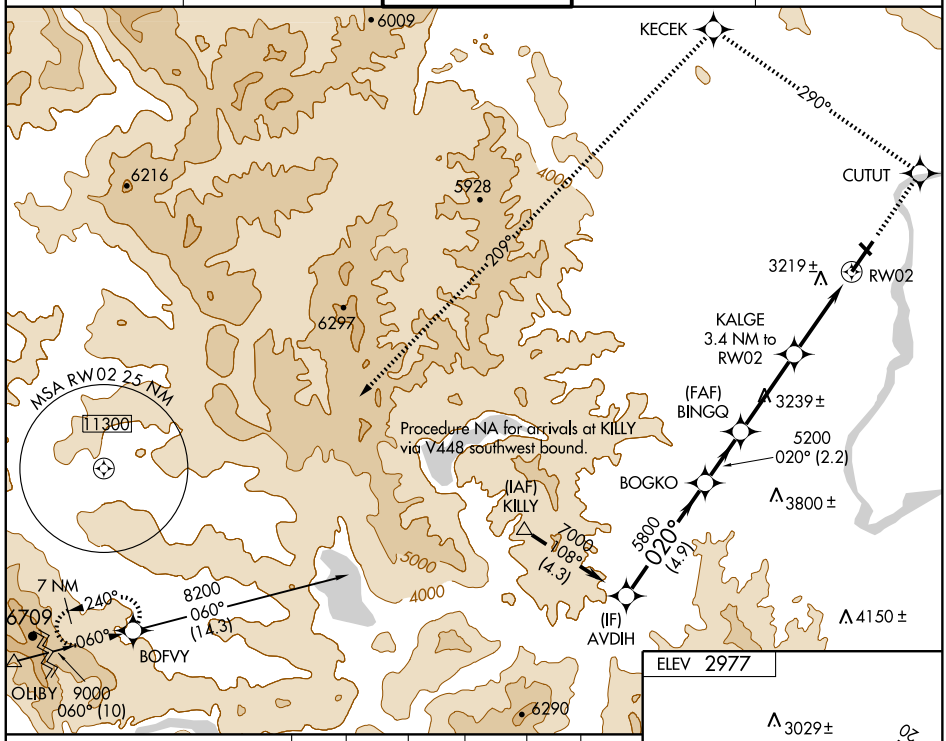
KALISPELL/ GLACIER PARK INTL (GPI)

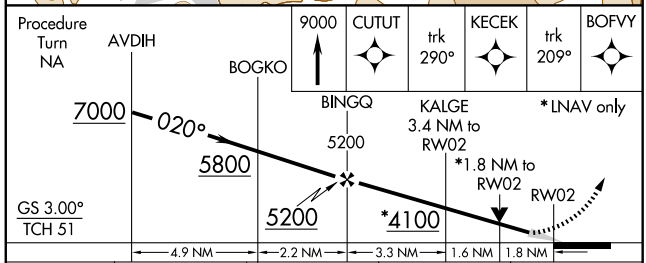
For inoperative MALSR, increase LPV visibility to 1¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (109°F). DME/DME RNP-0.3 NA.

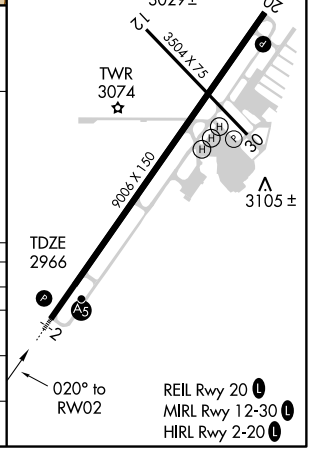
MALSR

MISSED APPROACH: Climb to 9000 direct CUTUT and via track 290° to KECEK and via track 209° to BOFVY and hold.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







CATEGORY	A	B	C	D
LPV DA	3297-¾ 331 (400-¾)			
LNAV/VNAV DA	3502-1½ 536 (600-1½)			
LNAV MDA	3600-½ 634 (700-½)		3600-1¼ 634 (700-1¼)	3600-1½ 634 (700-1½)
CIRCLING	3600-1 623 (700-1)		3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

KALISPELL, MONTANA

AL-887 (FAA)

APP CRS	Rwy Idg	9006
200°	TDZE	2977
	Apt Elev	2977

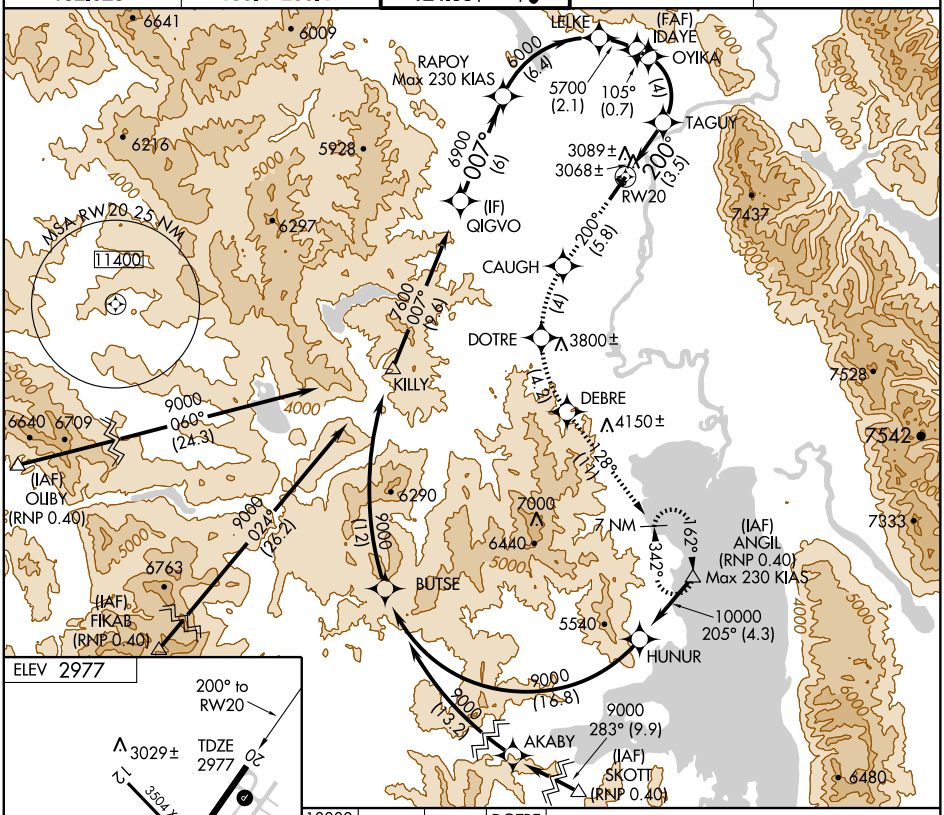
RNAV (RNP) RWY 20

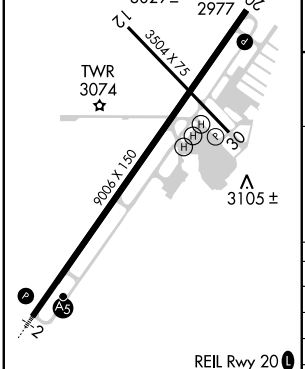
KALISPELL/ GLACIER PARK INTL (GPI)

RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F).
*Missed approach requires minimum climb of 235 feet per NM to 6900. Visibility reduction by helicopters NA.

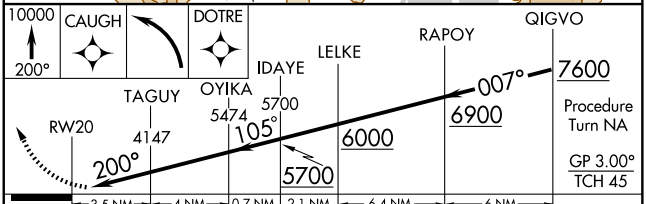
MISSED APPROACH: Climb to 10000 via 200° track to CAUGH and via left turn to DOTRE, and via left turn to DEBRE, and via 128° track to ANGIL and hold, continue climb-in-hold to 10000.

ATIS	SALT LAKE CENTER	GLACIER TOWER*	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95





REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L



CATEGORY	A	B	C	D
RNP 0.10 DA*	3344-1¼ 367 (400-1¼)			
RNP 0.30 DA*	3446-1¾ 469 (500-1¾)			
RNP 0.30 DA	3662-2½ 685 (700-2½)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	9006
020°	TDZE	2966
	Apt Elev	2977

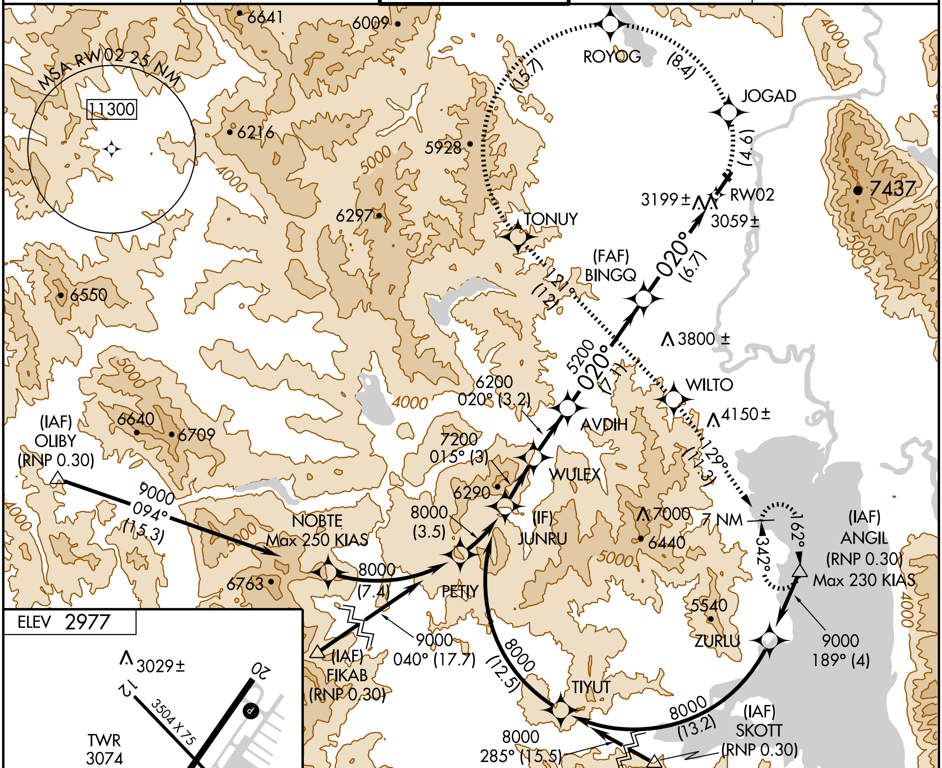
RNAV (RNP) Y RWY 2
KALISPELL/ GLACIER PARK INTL (GPI)

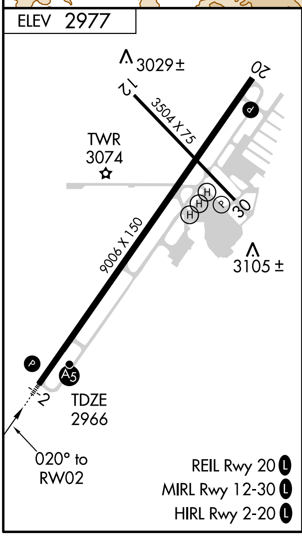
T RF and GPS required.
A *Missed approach requires minimum climb of 220 feet per NM to 6100.
Missed approach requires RNP less than 1.0.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). For inoperative MALSR increase RNP 0.10* visibility to 1¼ and RNP 0.30 visibility to 2.

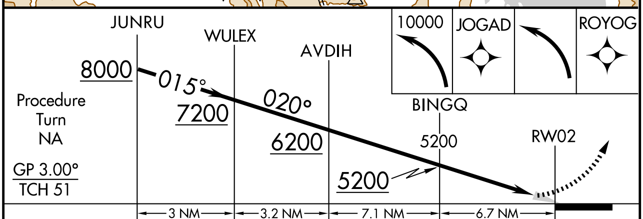
MALSR A5

MISSED APPROACH: Climb to 10000 via left turn to JOGAD, and via left turn to ROYOG and via left turn to TONUY, and via 121° track to WILTO and via 129° track to ANGIL and hold.

ATIS	SALT LAKE CENTER	GLACIER TOWER ★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95







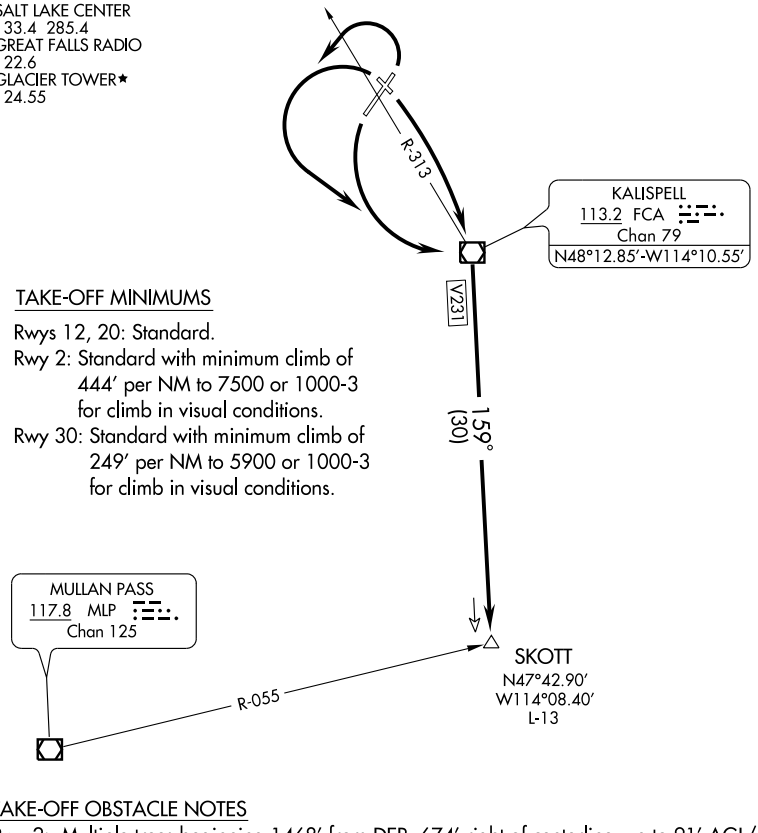
CATEGORY	A	B	C	D
RNP 0.10 DA*	NA	3340-¾ 374 (400-¾)		
RNP 0.30 DA	NA	3522-1½ 556 (600-1½)		

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SKOTT ONE DEPARTURE (OBSTACLE)

SALT LAKE CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
GLACIER TOWER★
124.55



TAKE-OFF MINIMUMS

Rwys 12, 20: Standard.
Rwy 2: Standard with minimum climb of 444' per NM to 7500 or 1000-3 for climb in visual conditions.
Rwy 30: Standard with minimum climb of 249' per NM to 5900 or 1000-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTES

Rwy 2: Multiple trees beginning 1468' from DER, 674' right of centerline, up to 91' AGL/3061' MSL.
Rwy 12: Multiple trees beginning 1426' from DER, 543' left of centerline, up to 129' AGL/3082' MSL.
Railroad 702' from DER, 317' left of centerline, 31' AGL/2997' MSL.
Road 544' from DER, 299' left of centerline, 22' AGL/2988' MSL.
Rwy 20: Multiple trees beginning 2742' from DER, 1140' left of centerline, up to 107' AGL/3169' MSL.
Rwy 30: Multiple trees beginning 1848' from DER, 722' left of centerline, up to 104' AGL/3067' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 2: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 3800, then via FCA R-313 to FCA VOR/DME, thence....

TAKE-OFF RUNWAY 30: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 3800, then via FCA R-313 to FCA VOR/DME, thence....

TAKE-OFF RUNWAY 12: Climbing right turn direct FCA VOR/DME, thence....

TAKE-OFF RUNWAY 20: Climbing left turn direct FCA VOR/DME, thence....

....continue climb to 10,000 via FCA R-159 to SKOTT INT.

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME FCA	APP CRS	Rwy Idg	3504
113.2	316°	TDZE	2974
Chan 79		Apt Elev	2977

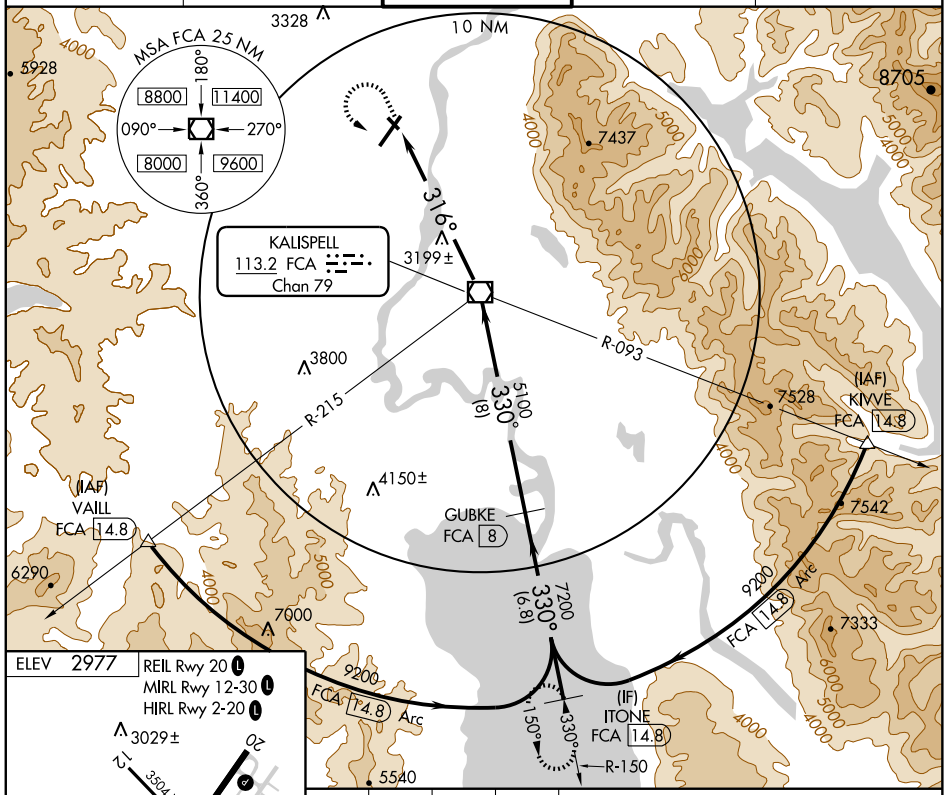
VOR/DME RWY 30

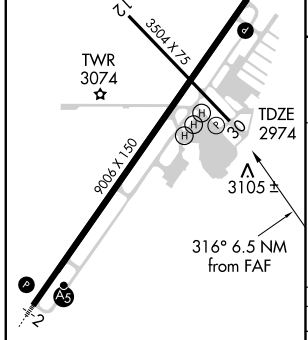
KALISPELL/ GLACIER PARK INTL (GPI)

Visibility reduction by helicopters not authorized. When VGSI inoperative, straight-in minimums not authorized at night.

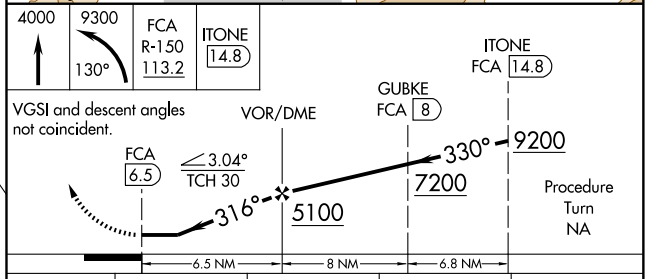
MISSED APPROACH: Climb to 4000 then climbing left turn to 9300 via heading 130° and FCA R-150 to ITONE/14.8 DME and hold, continue climb-in-hold to 9300.

ATIS	SALT LAKE CENTER	GLACIER TOWER★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-30	3480-1	506 (600-1)	3480-1½	506 (600-1½)
CIRCLING	3520-1	543 (600-1)	3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5200
036°	TDZE	3488
	Apt Elev	3517

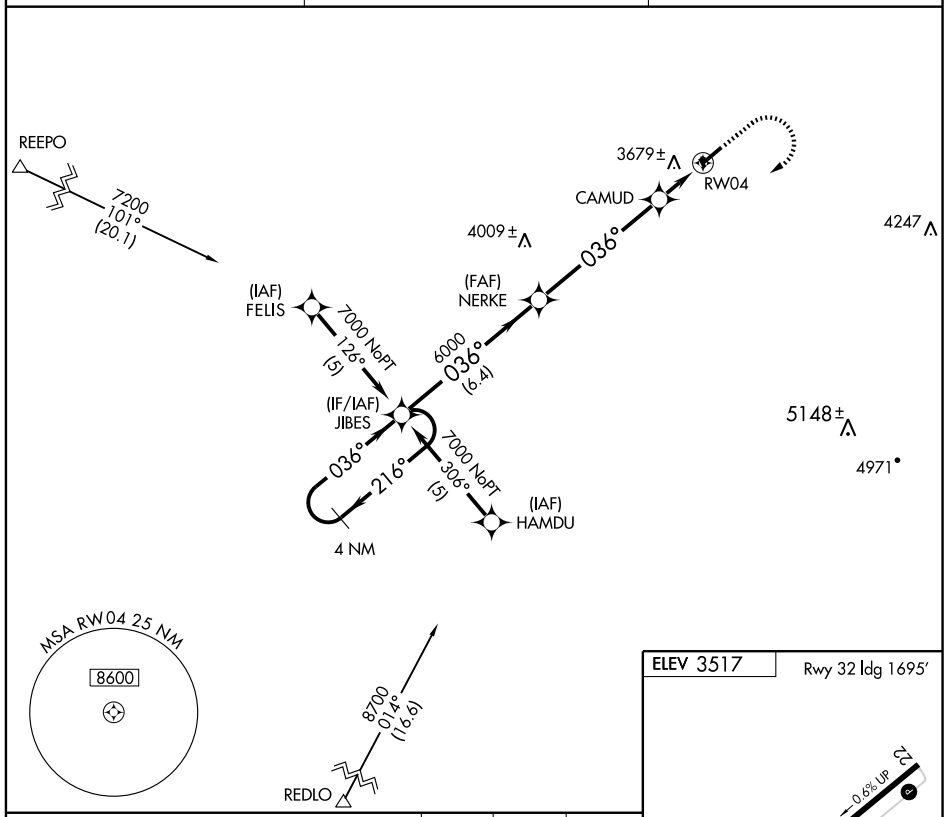
RNAV (GPS) RWY 4

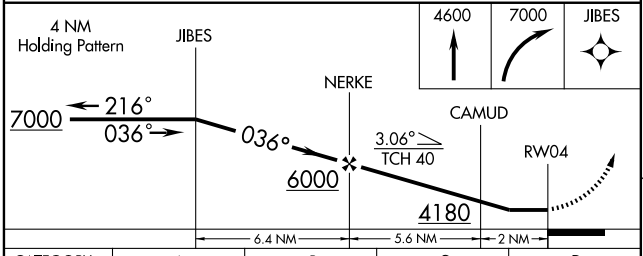
LAUREL MUNI (6S8)

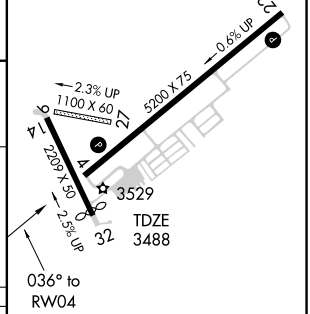
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Billings altimeter setting.

MISSED APPROACH: Climb to 4600 then climbing right turn to 7000 direct JIBES WP and hold.

AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV	4120-1	632 (700-1)	4120-1¾ 632 (700-1¾)	4120-2 632 (700-2)
CIRCLING	4220-1	703 (800-1)	4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5200
216°	TDZE	3472
	Apt Elev	3517

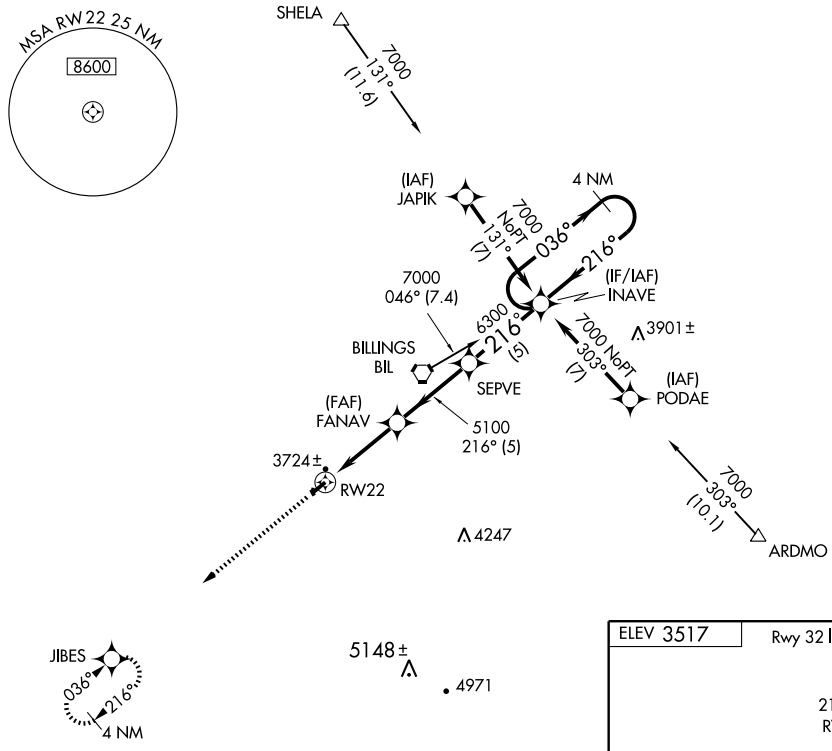
RNAV (GPS) RWY 22

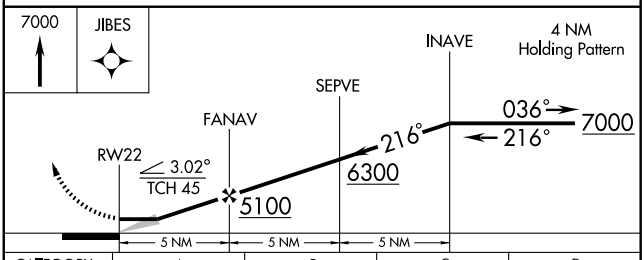
LAUREL MUNI (6S8)

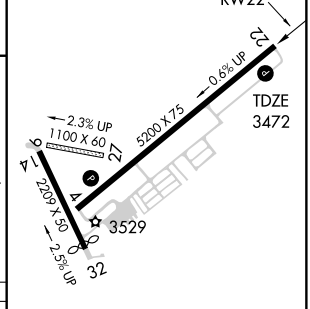
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Billings altimeter setting.

MISSED APPROACH: Climb to 7000 direct JIBES WP and hold.

AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4100-1	628 (600-1)	4100-1¾ 628 (600-1¾)	4100-2 628 (600-2)
CIRCLING	4220-1	703 (800-1)	4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC BIL 114.5 Chan 92	APP CRS 208°	Rwy Idg 5200 TDZE 3472 Apt Elev 3517

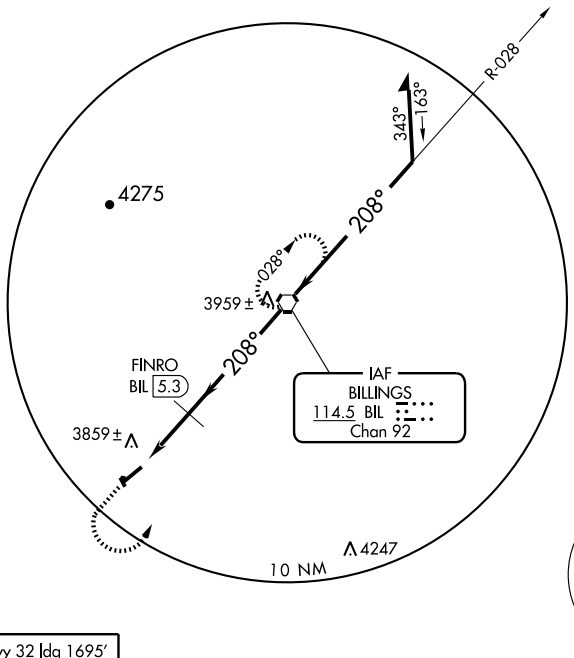
VOR RWY 22
LAUREL MUNI (6S8)

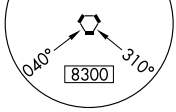
NA

Use Billings altimeter setting.

MISSED APPROACH: Climb to 4700 then climbing left turn to 6300 direct BIL VORTAC and hold.

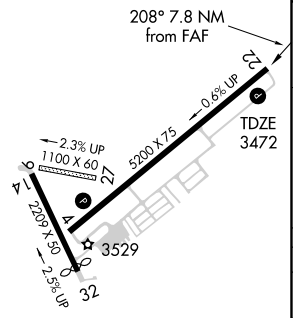
AWOS-3	BILLINGS APP CON	UNICOM
123.05	119.2 120.5 284.6	123.05 (CTAF) L





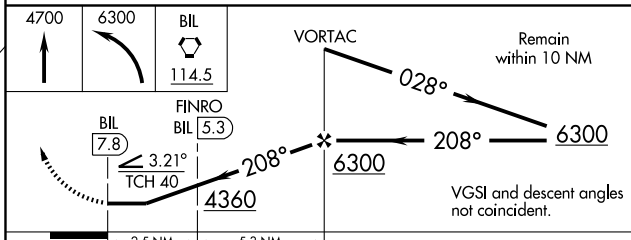
ELEV 3517

Rwy 32 ldg 1695'



MIRL Rwy 4-22 L

FAF to MAP 7.8 NM					
Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36



CATEGORY	A	B	C	D
S-22	4360-1¼ 888 (900-1¼)		4360-2¾ 888 (900-2¾)	4360-3 888 (900-3)
CIRCLING	4360-1¼ 843 (900-1¼)		4360-2¾ 843 (900-2¾)	4360-3 843 (900-3)
FINRO FIX MINIMUMS				
S-22	4160-1 688 (700-1)		4160-2 688 (700-2)	4160-2¼ 688 (700-2¼)
CIRCLING	4220-1 703 (800-1)		4220-2 703 (800-2)	4340-2¾ 823 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	6100
CH 86700	075°	TDZE	4129
W07A		Apt Elev	4170

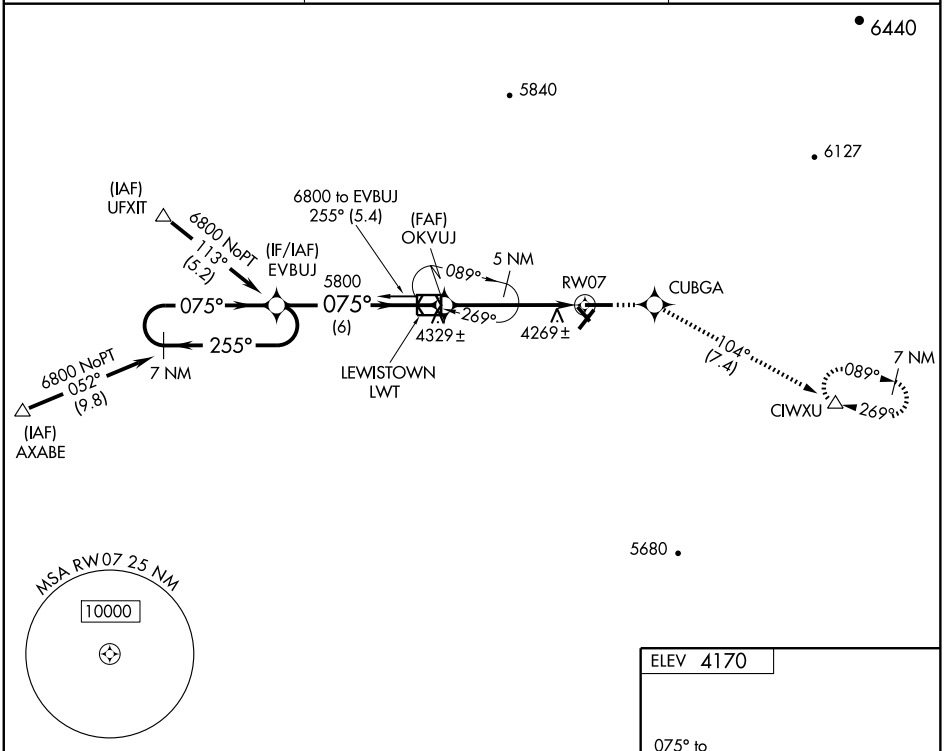
RNAV (GPS) RWY 7

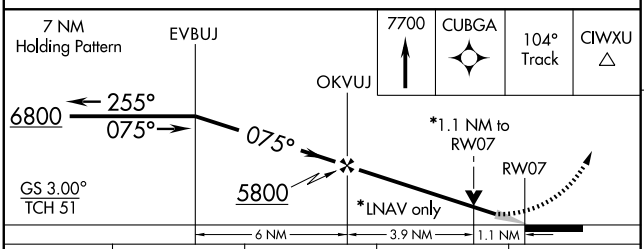
LEWISTOWN MUNI (LWT)

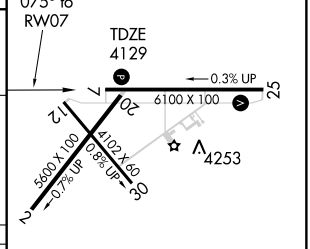
DME/DME RNP -0.3 NA.
If local altimeter setting not received, procedure NA.
Baro-VNAV NA below -23°C (-9°F)

MISSED APPROACH: Climb to 7700 direct CUBGA and via 104° track to CIWXU and hold, continue climb-in-hold to 7700.

ASOS	GREAT FALLS RADIO	UNICOM
118.375	122.2	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	4379-¾ 250 (300-¾)			
LNAV/VNAV DA	4636-1¾ 507 (500-1¾)			
LNAV MDA	4520-1 391 (400-1)			4520-1¼ 391 (400-1¼)
CIRCLING	4680-1¾ 510 (600-1¾)		4780-1¾ 610 (700-1¾)	4860-2¼ 690 (700-2¼)

REIL Rwys 7 and 25 L
MIRL Rwys 2-20, 7-25 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME LWT	APP CRS	Rwy Idg	6100
112.0	075°	TDZE	4126
Chan 57		Apt Elev	4167

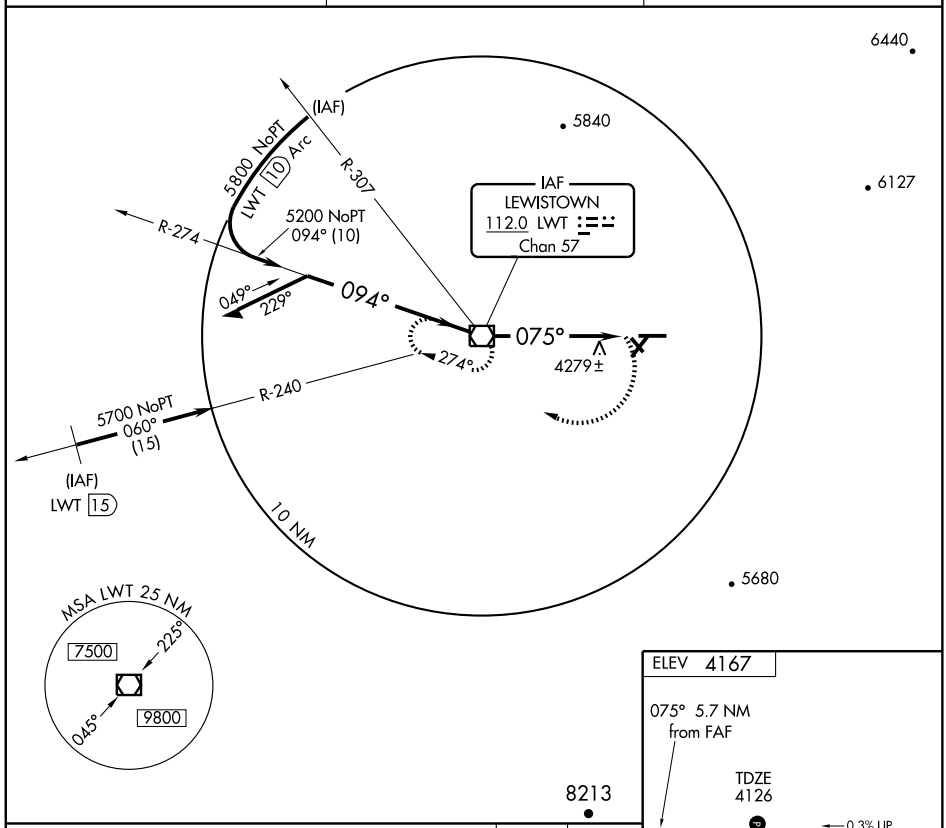
VOR RWY 7

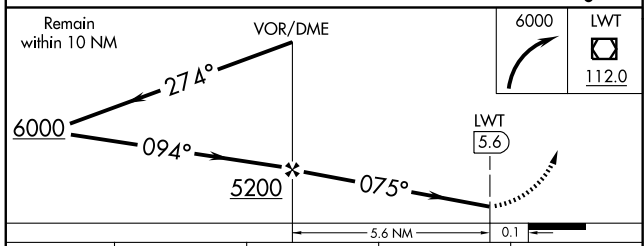
LEWISTOWN MUNI (LWT)

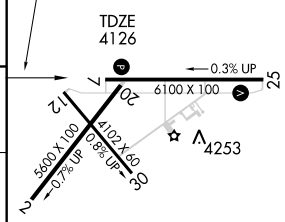
If local altimeter setting not received, procedure not authorized.

MISSED APPROACH: Climbing right turn to 6000 direct LWT VOR/DME and hold.

ASOS	GREAT FALLS RADIO	UNICOM
118.375	122.2	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-7	4600-1	474 (500-1)	4600-1¼ 474 (500-1¼)	4600-1½ 474 (500-1½)
CIRCLING	4660-1	493 (500-1)	4660-1½ 493 (500-1½)	4880-2¼ 713 (800-2¼)

REIL Rwys 7 and 25 L
MIRL Rwys 2-20, 7-25 and 12-30 L

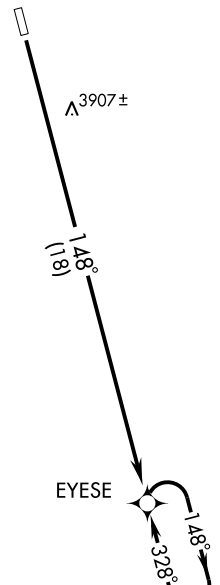
FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NW-1, 14 JAN 2010 to 11 FEB 2010

EYESE ONE DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
123.95 282.3
AWOS-A
118.575



NOTE: 1. GPS Required.
2. RNAV 1

TAKE-OFF MINIMUMS: 1400-2 or standard with a minimum climb of 380′ per NM to 9600′.
3907′ terrain 23,697′ from runway threshold, 2491′ left of centerline.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15: Climb via 148° course to 9600′ to EYESE WP, then continue climb to 12,000′ within the EYESE holding pattern.

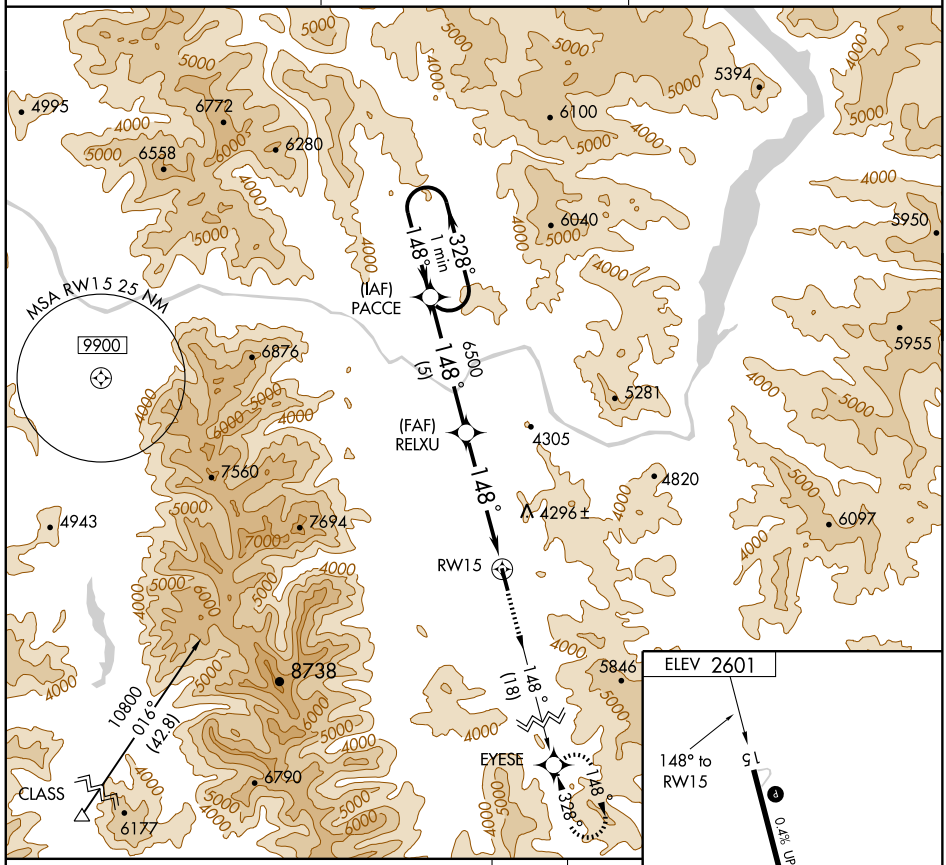
APP CRS	Rwy Idg	N/A
148°	TDZE	N/A
	Apt Elev	2601

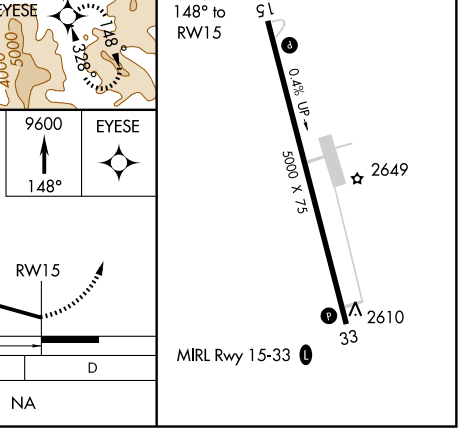
GPS-A
LIBBY (S59)

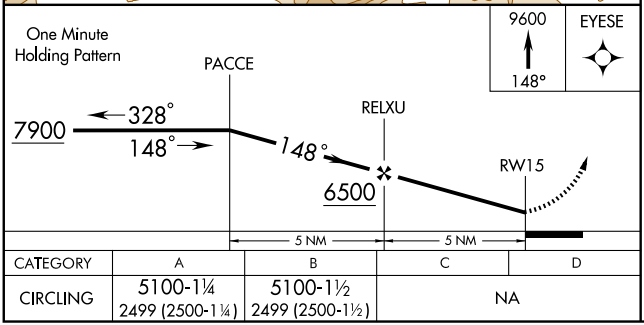
Obtain local altimeter setting on CTAF; when not received procedure not authorized.
Circling not authorized east of Rwys 15-33 at night.

MISSED APPROACH: Climb to 9600 via 148° course to EYESE WP and hold.

AWOS-A	SEATTLE CENTER	UNICOM
118.575	123.95 282.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5100-1¼ 2499 (2500-1¼)	5100-1½ 2499 (2500-1½)	NA	

APP CRS	Rwy Idg	5701
234°	TDZE	4649
	Apt Elev	4660

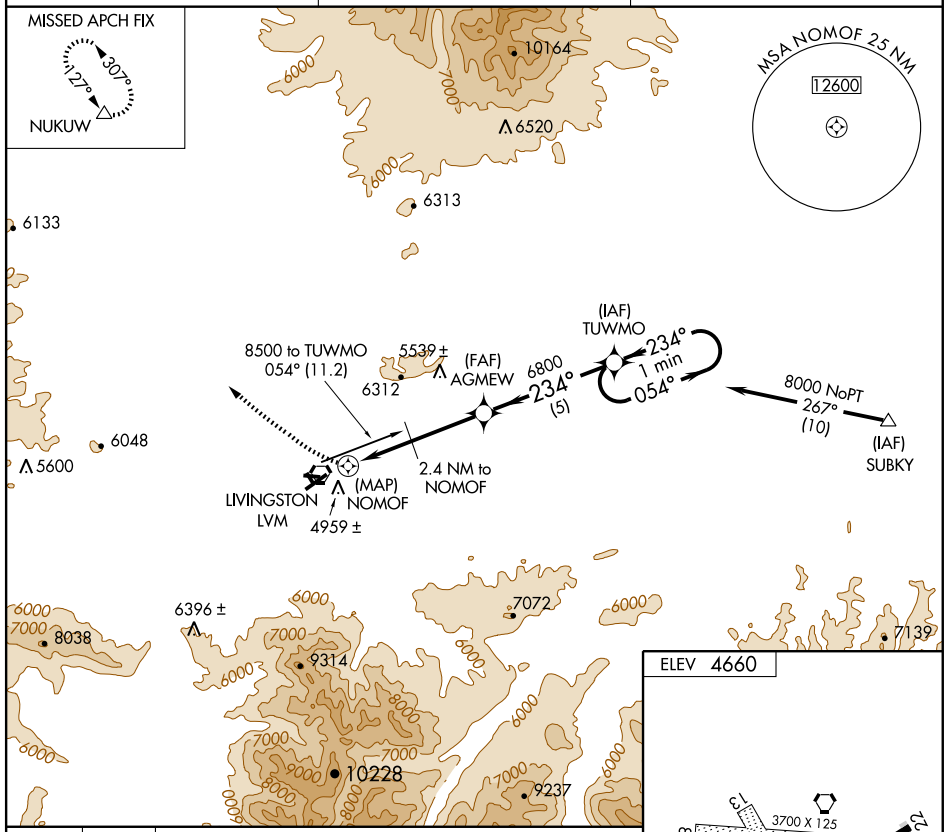
GPS RWY 22

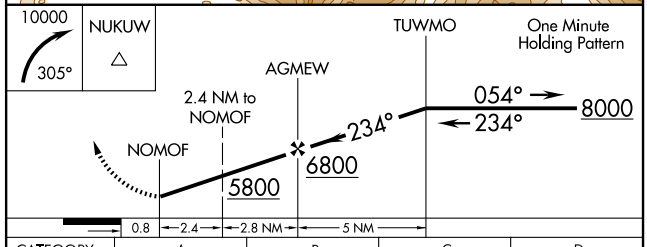
LIVINGSTON/MISSION FIELD (LVM)

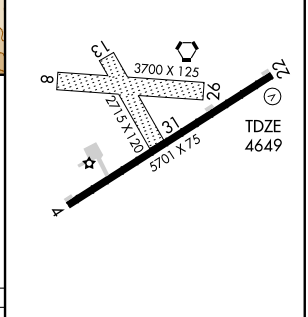
NA

MISSED APPROACH: Climbing right turn to 10000 via 305° course to NUKUW WP and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF) L







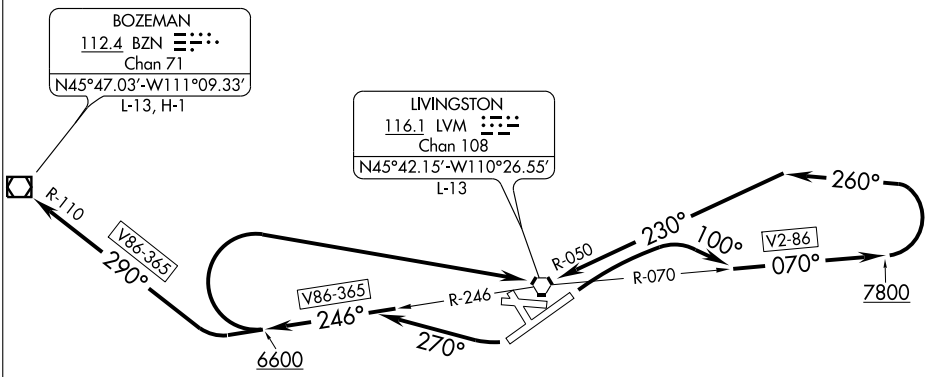
CATEGORY	A	B	C	D
S-22	5080-1	431 (500-1)	5080-1¼ 431 (500-1¼)	5080-1½ 431 (500-1½)
CIRCLING	5360-1 700 (700-1)	5380-1 720 (800-1)	5380-2 720 (800-2)	5580-3 920 (1000-3)

REIL Rwy 22
MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LIVINGSTON ONE DEPARTURE (OBSTACLE)

GREAT FALLS RADIO
122.2
ASOS 135.275



TAKE-OFF MINIMUMS

Rwys 8, 13, 26, 31: NA-Environmental.
Rwy 4: Standard.
Rwy 22: Standard with minimum climb of 300' per NM to 6800 or 2700-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTE

Rwy 22: Multiple trees beginning 400' from DER, 256' right of centerline, up to 100' AGL/4719' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climbing right turn heading 100° and LVM VORTAC R-070 outbound; aircraft departing eastbound, climb via LVM R-070/V2-86 enroute. All others continue climb on LVM R-070 to 7800, then climbing left turn via heading 260° and LVM R-050 to cross LVM VORTAC at or above 9000, then climb enroute.

TAKE-OFF RUNWAY 22: Climbing right turn heading 270° and LVM VORTAC R-246 outbound; aircraft departing eastbound, continue climb via LVM R-246 outbound to 6600, then climbing right turn direct LVM VORTAC, then climb on LVM R-070/V2-86 enroute. All other aircraft continue climb via LVM VORTAC R-246 and BZN VOR/DME R-110 to BZN. For climb in visual conditions, cross LVM VORTAC at or above 9000 before proceeding via filed airway route.

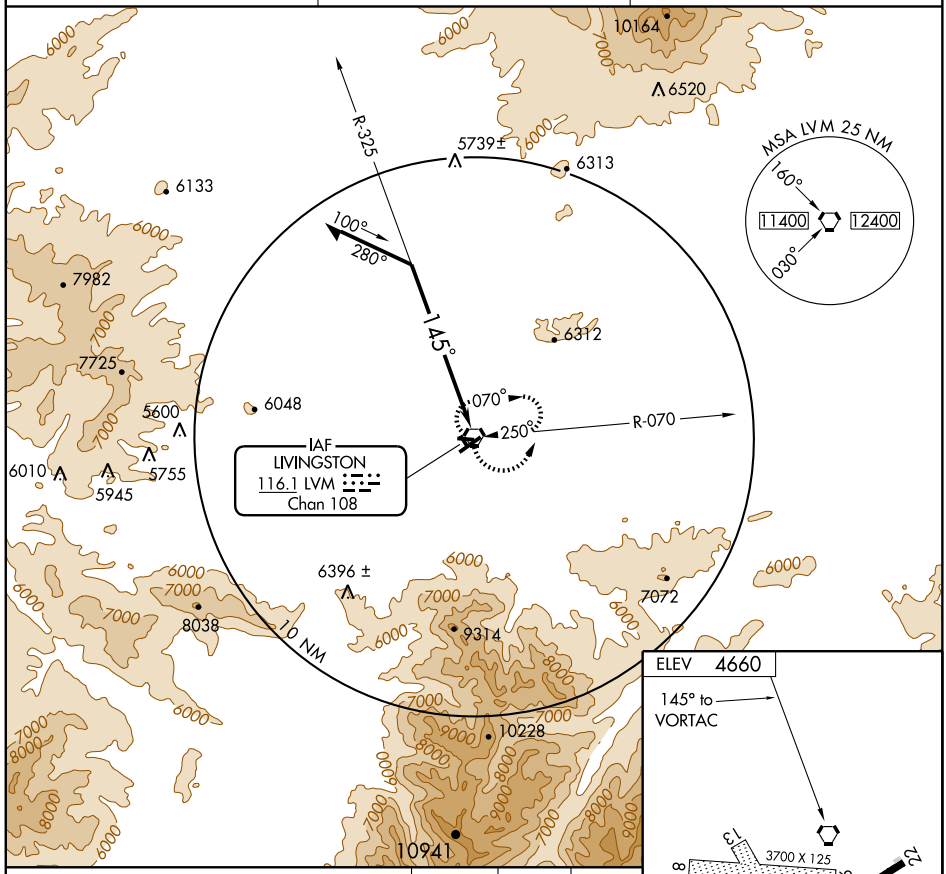
VORTAC LVM	APP CRS	Rwy Idg	N/A
116.1	145°	TDZE	N/A
Chan 108		Apt Elev	4660

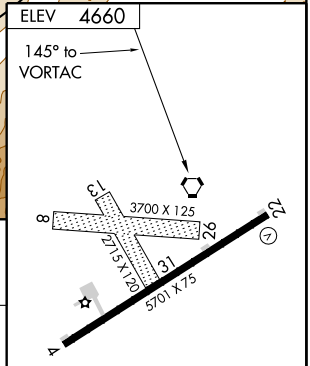
VOR-A

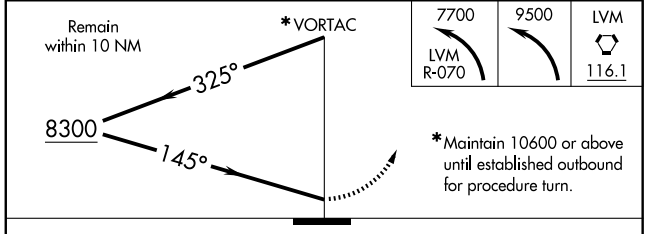
LIVINGSTON/ MISSION FIELD (LVM)

MISSED APPROACH: Climbing left turn to 7700 via LVM R-070, then climbing left turn to 9500 direct LVM VORTAC and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF) L







*Maintain 10600 or above until established outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	6800-1¼ 2140 (2200-1¼)	6800-1½ 2140 (2200-1½)	6800-3	2140 (2200-3)

REIL Rwy 22
MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC LVM	APP CRS	Rwy Idg	N/A
116.1	145°	TDZE	N/A
Chan 108		Apt Elev	4660

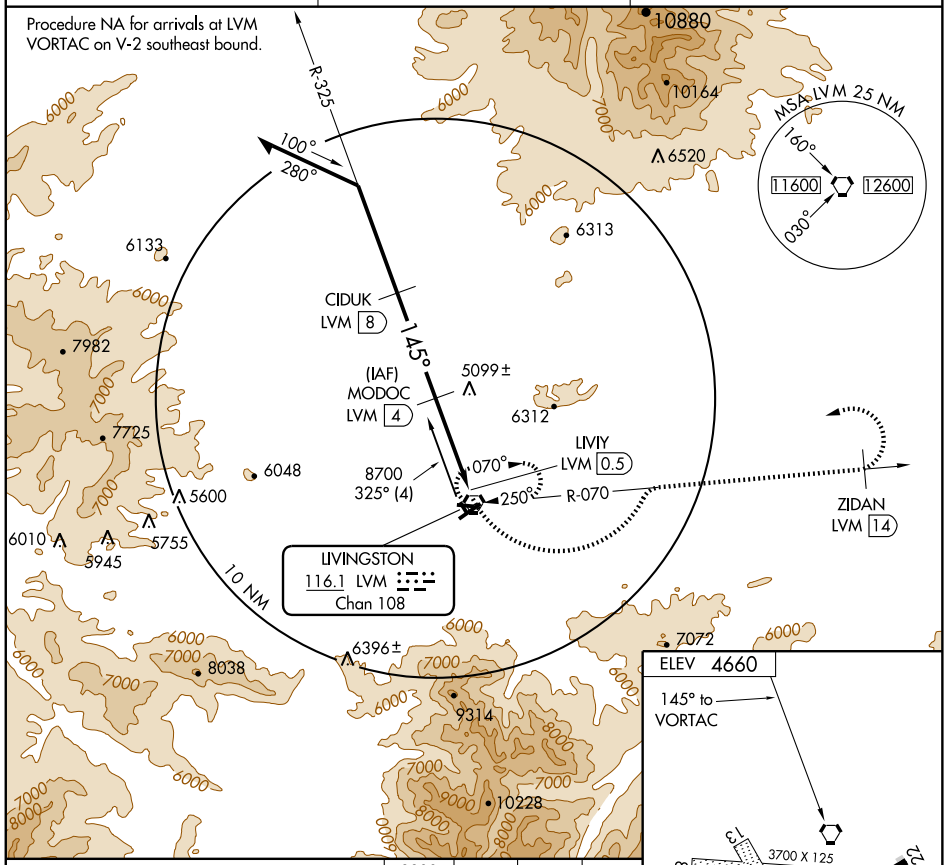
VOR/DME-B

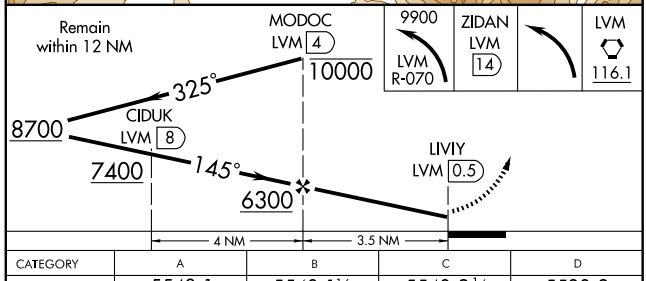
LIVINGSTON/ MISSION FIELD (LVM)

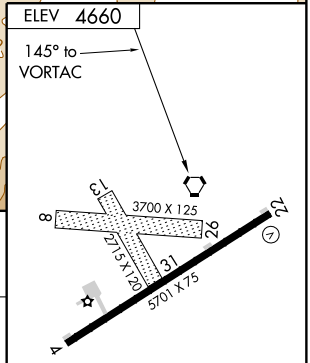
MISSED APPROACH: Climbing left turn to 9900 via LVM VORTAC R-070 to ZIDAN/14 DME and left turn direct LVM VORTAC and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.275	122.2	123.0 (CTAF) L

Procedure NA for arrivals at LVM VORTAC on V-2 southeast bound.







CATEGORY	A	B	C	D
CIRCLING	5540-1 880 (900-1)	5540-1¼ 880 (900-1¼)	5540-2½ 880 (900-2½)	5580-3 920 (1000-3)

REIL Rwy 22
MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4500
074°	TDZE	2254
	Apt Elev	2254

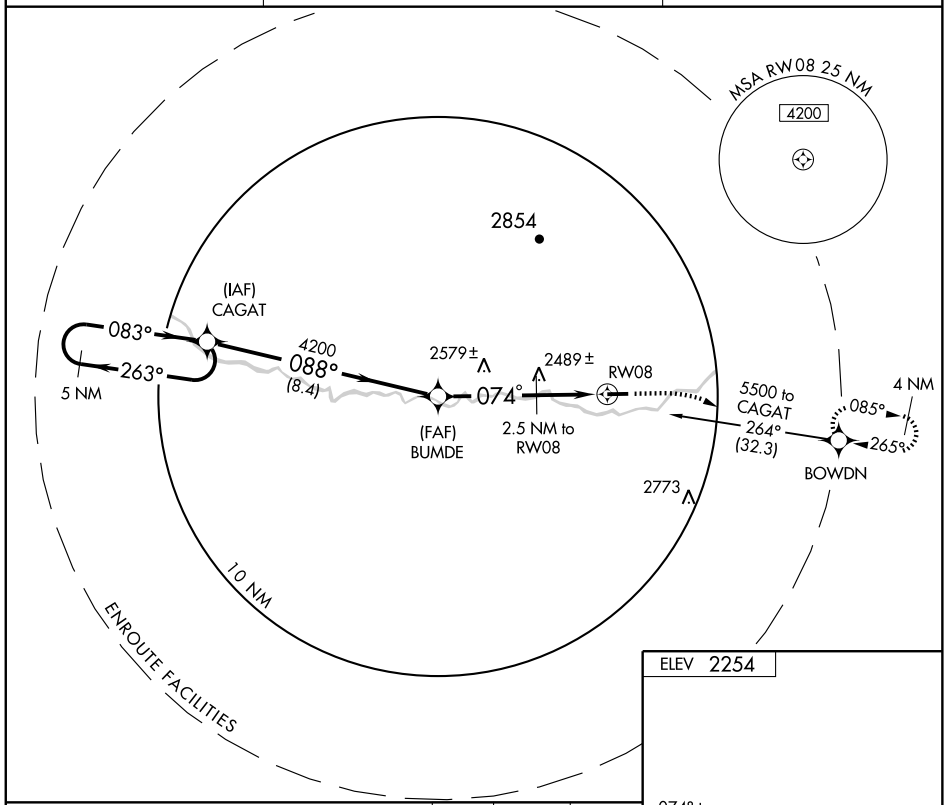
RNAV (GPS) RWY 8

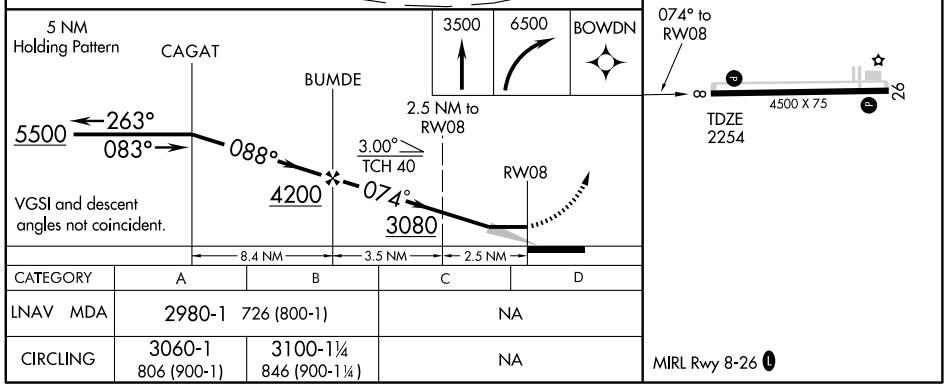
MALTA (M75)

NA Use Glasgow altimeter setting; when not received procedure not authorized.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3500 then climbing right turn to 6500 direct BOWDN WP and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2980-1 726 (800-1)		NA	
CIRCLING	3060-1 806 (900-1)	3100-1¼ 846 (900-1¼)	NA	

MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

MALTA, MONTANA

AL-9493 (FAA)

APP CRS	Rwy Idg	4500
254°	TDZE	2254
	Apt Elev	2254

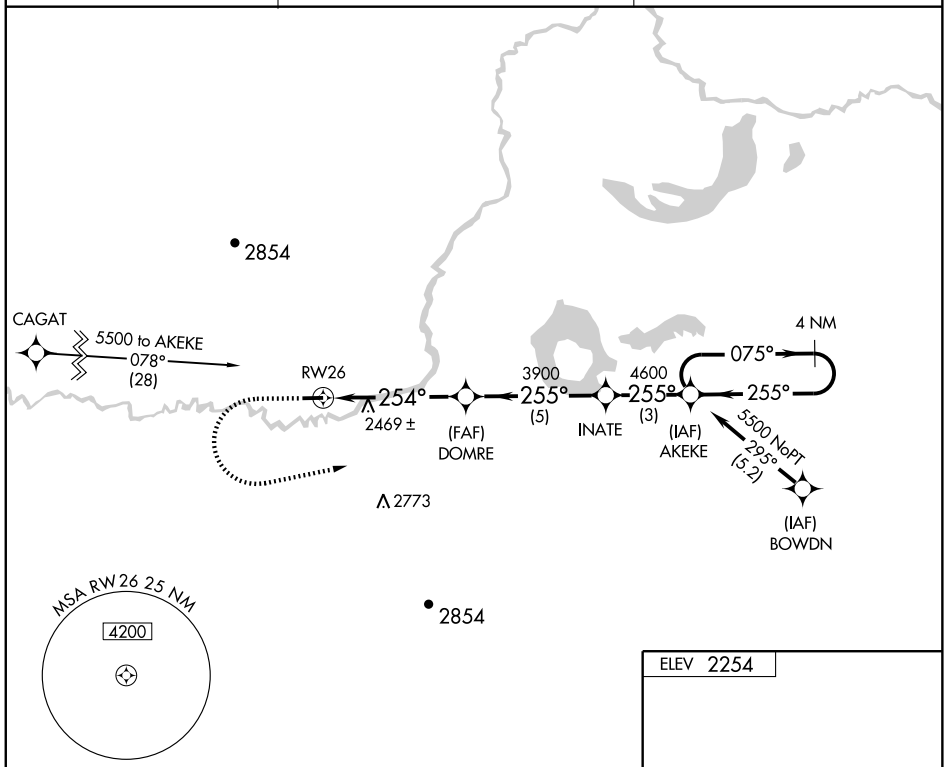
RNAV (GPS) RWY 26

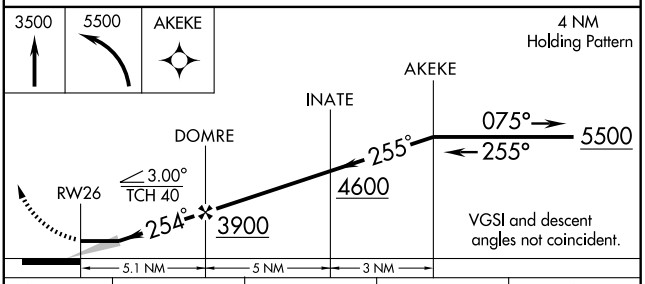
MALTA (M75)

NA Use Glasgow altimeter setting; when not received procedure not authorized.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

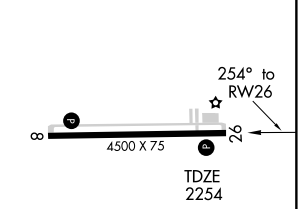
MISSED APPROACH: Climb to 3500 then climbing left turn to 5500 direct AKEKE WP and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2960-1 706 (800-1)		NA	
CIRCLING	3060-1 806 (900-1)	3100-1¼ 846 (900-1¼)	NA	



MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB HTN 320	APP CRS 057°	Rwy Idg 5680 TDZE 2629 Apt Elev 2630

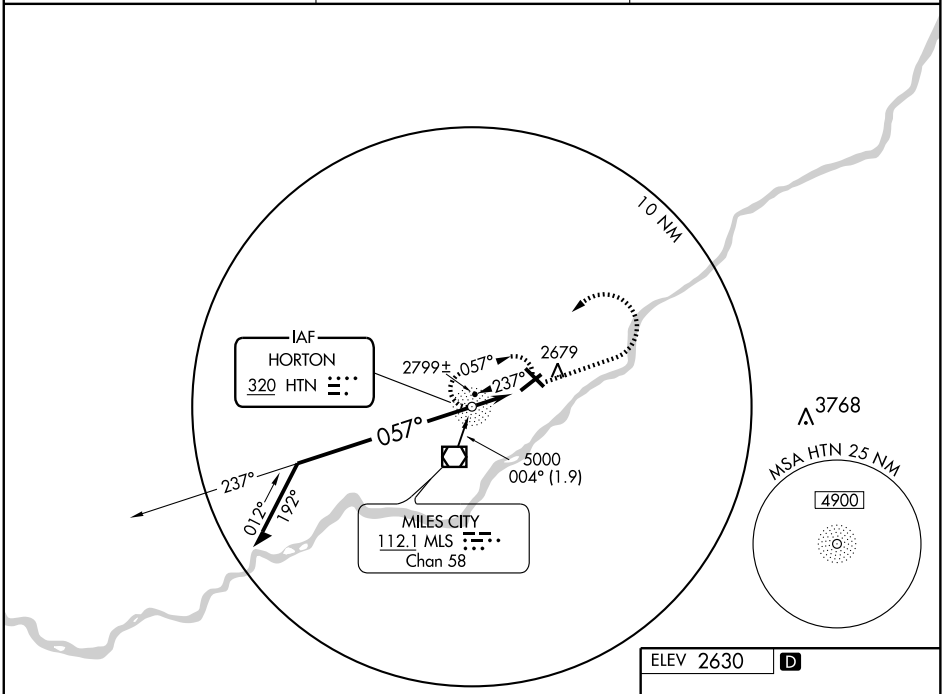
NDB RWY 4

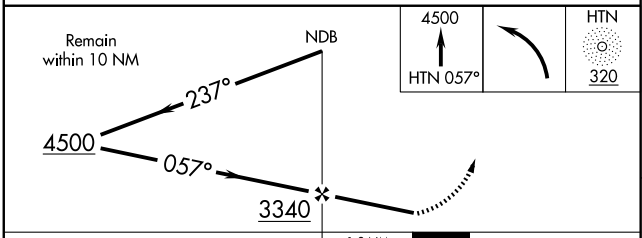
MILES CITY/ FRANK WILEY FIELD (MLS)

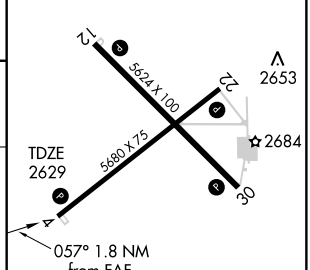
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4500 via 057° bearing from HTN NDB then left turn direct HTN NDB and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-4	3060-1 431 (500-1)		3060-1¼ 431 (500-1¼)	3060-1½ 431 (500-1½)
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

REIL Rwys 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

FAF to MAP 1.8 NM					
Knots	60	90	120	150	180
Min:Sec	1:48	1:12	0:54	0:43	0:36

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5680
CH 42600	040°	TDZE	2629
W04A		Apt Elev	2630

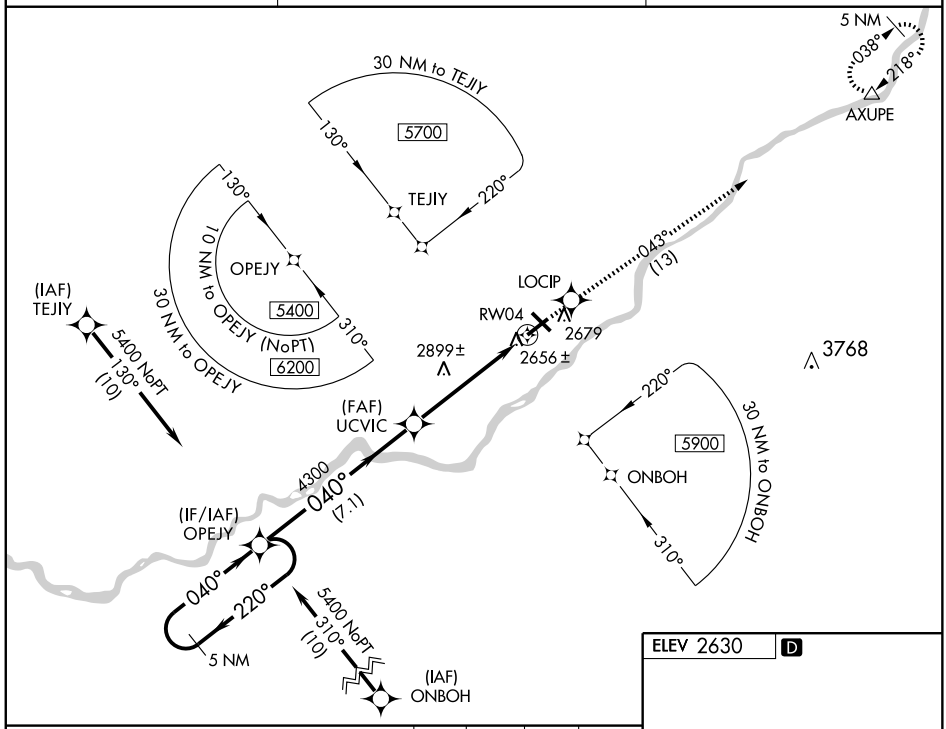
RNAV (GPS) RWY 4

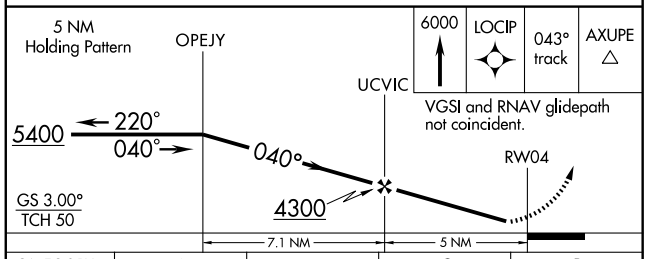
MILES CITY/ FRANK WILEY FIELD (MLS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 32°C (111°F).
Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6000 direct LOCIP and via 043° track to AXUPE and hold.

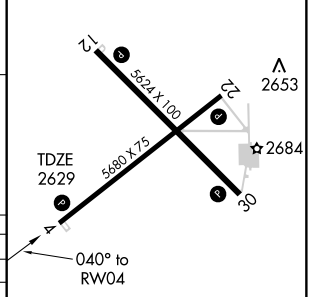
ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2879-1 250 (300-1)			
LNAV/VNAV DA	2926-1 297 (300-1)			
LNAV MDA	3160-1 531 (600-1)		3160-1½ 531 (600-1½)	3160-1¾ 531 (600-1¾)
CIRCLING	3160-1 530 (600-1)		3160-1½ 530 (600-1½)	3180-2 550 (600-2)

ELEV 2630 D



REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

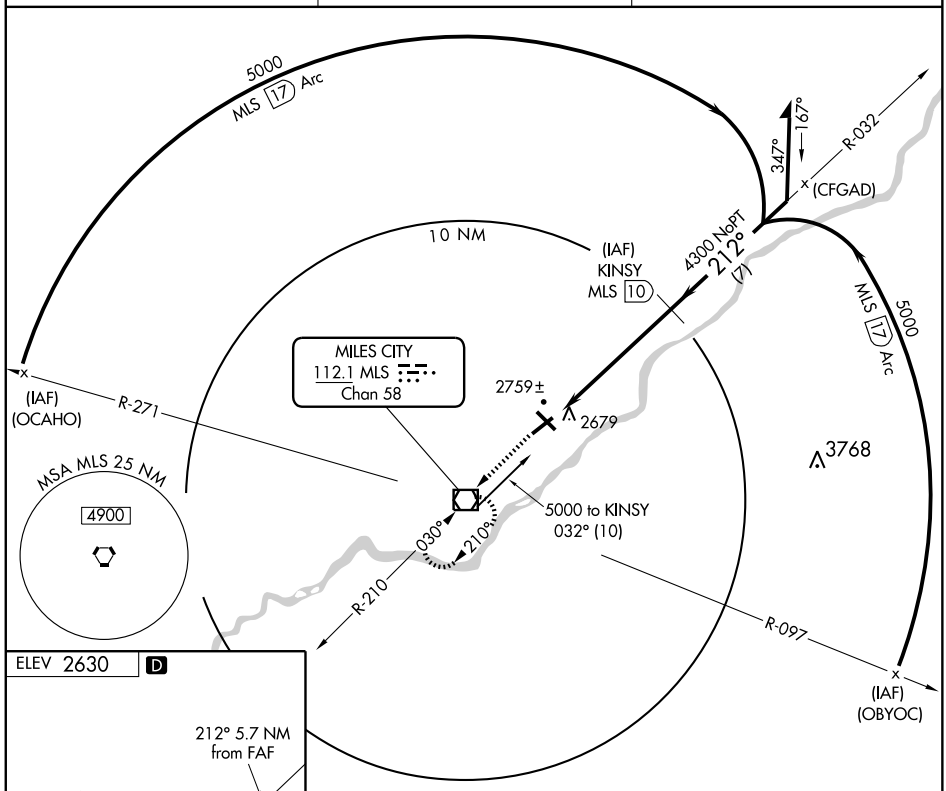
VORTAC MLS	APP CRS	Rwy Idg	5680
112.1	212°	TDZE	2628
Chan 58		Apt Elev	2630

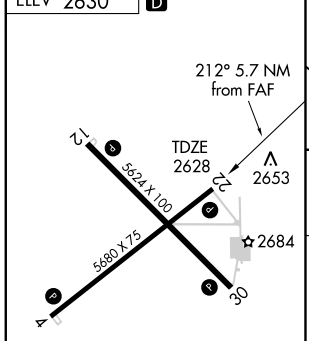
VOR/DME or GPS RWY 22

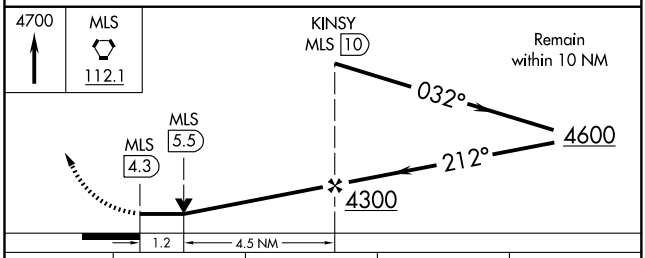
MILES CITY/FRANK WILEY FIELD (MLS)

MISSED APPROACH: Climb direct to MLS VORTAC. Continue climb to 4700 in MLS VORTAC holding pattern.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-22	3020-1 392 (400-1)			3020-1¼ 392 (400-1¼)
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC MLS	APP CRS	Rwy Idg	5680
112.1	030°	TDZE	2629
Chan 58		Apt Elev	2630

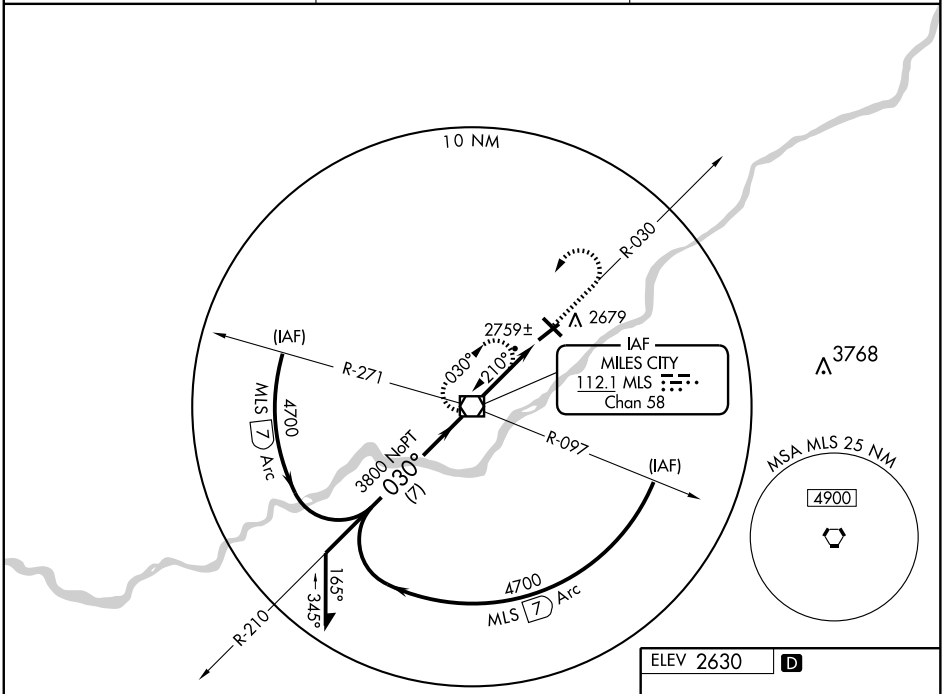
VOR RWY 4

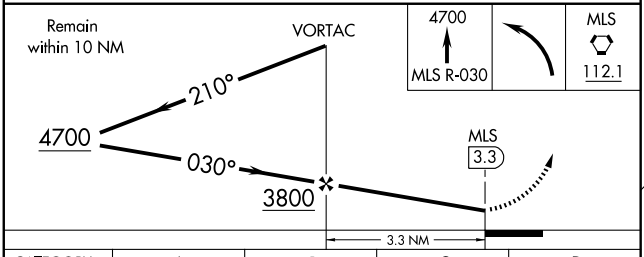
MILES CITY/ FRANK WILEY FIELD (MLS)

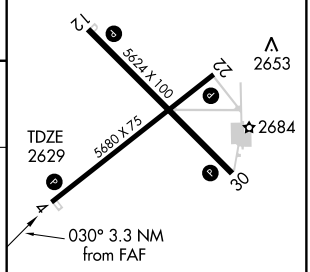
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4700 via MLS R-030 then left turn direct MLS VORTAC and hold.

ASOS	GREAT FALLS RADIO	UNICOM
135.575	122.2 255.4	123.0 (CTAF) L





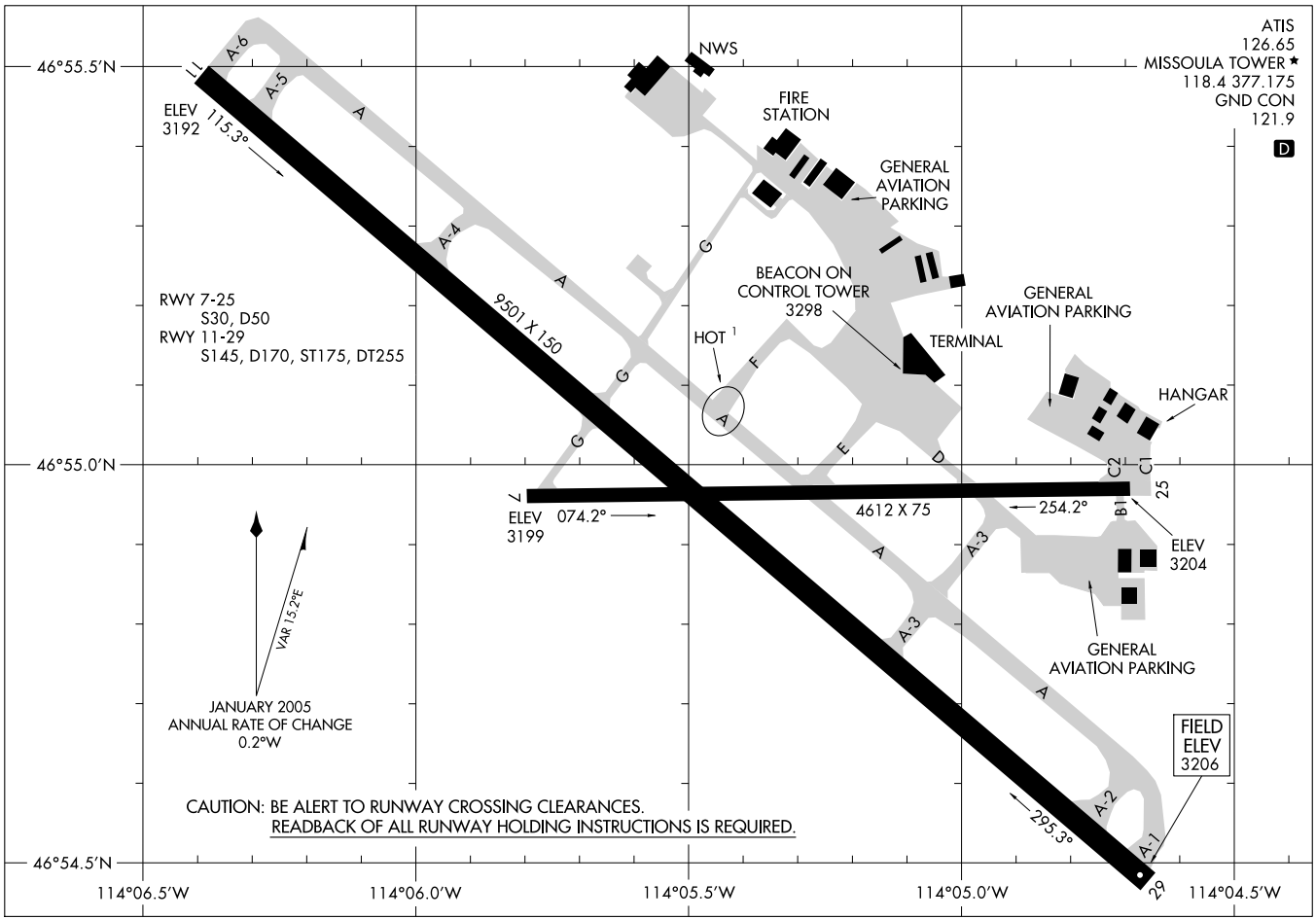


CATEGORY	A	B	C	D
S-4	3040-1 411 (500-1)		3040-1¼ 411 (500-1¼)	
CIRCLING	3060-1 430 (500-1)	3080-1 450 (500-1)	3100-1½ 470 (500-1½)	3180-2 550 (600-2)

REIL Rwys 4, 12, 22 and 30 L
MIRL Rwys 4-22 and 12-30 L

FAF to MAP 3.3 NM					
Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

NW-1, 14 JAN 2010 to 11 FEB 2010


AIRPORT DIAGRAM
AL-266 (FAA)
MISSOULA INTL (MSO)
MISSOULA, MONTANA
ATIS
126.65
MISSOULA TOWER ★
118.4 377.175
GND CON
121.9
D
46°55.5'N
46°55.0'N
46°54.5'N
114°06.5'W
114°06.0'W
114°05.5'W
114°05.0'W
114°04.5'W
NWS
FIRE STATION
GENERAL AVIATION PARKING
BEACON ON CONTROL TOWER 3298
TERMINAL
HOT 1
GENERAL AVIATION PARKING
HANGAR
ELEV 3192
115.3°
9501 X 150
RWY 7-25
S30, D50
RWY 11-29
S145, D170, ST175, DT255
ELEV 3199
074.2°
4612 X 75
254.2°
ELEV 3204
GENERAL AVIATION PARKING
VAR 15.2°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
FIELD ELEV 3206
295.3°
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
A-1
A-2
A-3
A-4
A-5
A-6
B1
C1
C2
25
29

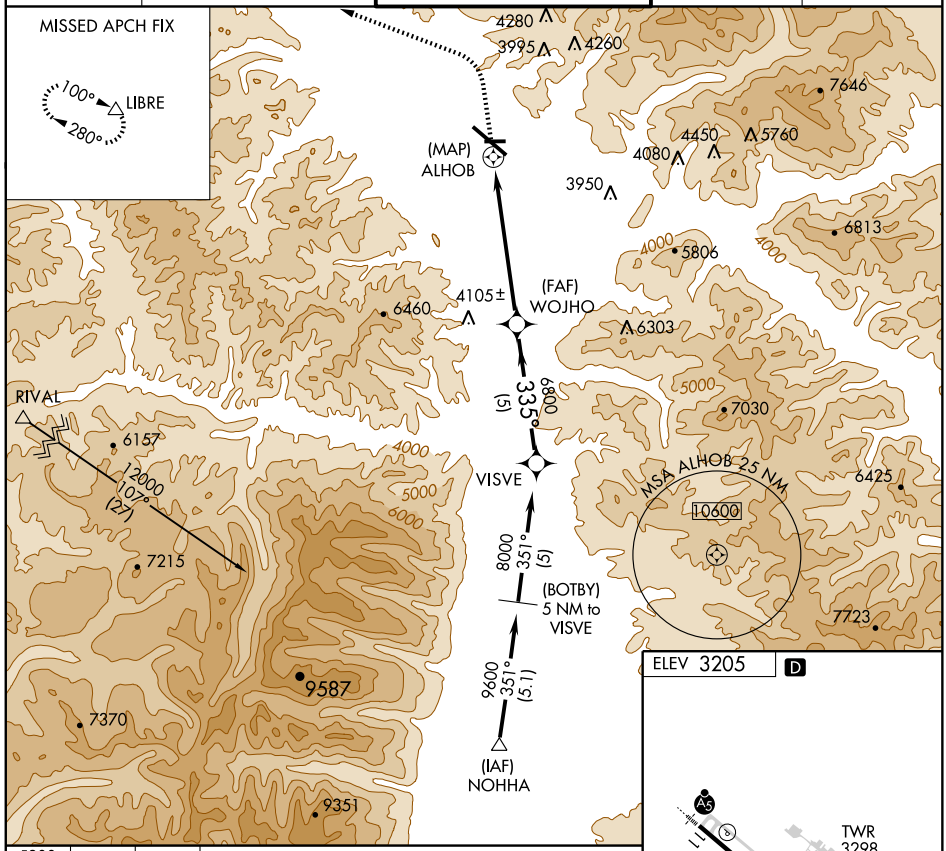
APP CRS	Rwy Idg	N/A
335°	TDZE	N/A
	Apt Elev	3205

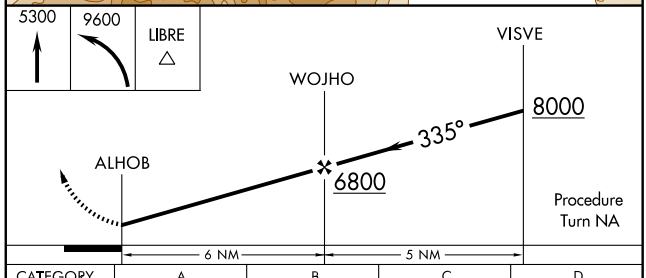
GPS-D
MISSOULA INTL (MSO)

NA

MISSED APPROACH: Climb to 5300 then climbing left turn to 9600 direct LIBRE WP and hold.

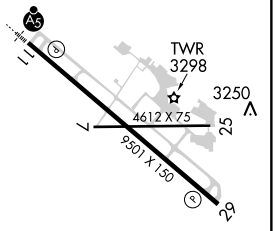
ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95





CATEGORY	A	B	C	D
CIRCLING	5120-1¼ 1915 (2000-1¼)	5120-1½ 1915 (2000-1½)	5120-3 1915 (2000-3)	

ELEV 3205 D



335° to ALHOB

REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

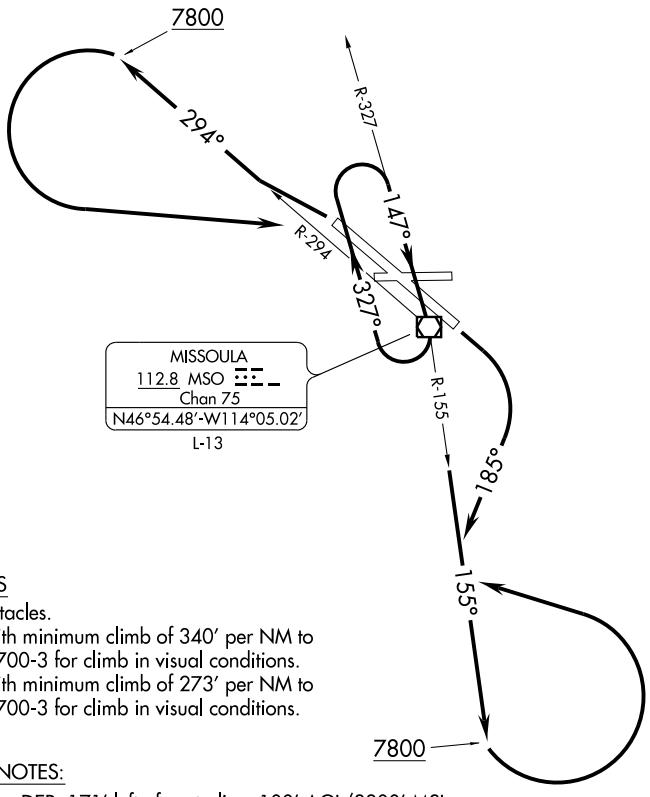
NW-1, 14 JAN 2010 to 11 FEB 2010

GRZLY ONE DEPARTURE (OBSTACLE)

SL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS 126.65
GND CON
121.9
MISSOULA TOWER ★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4



TAKE-OFF MINIMUMS

RWY 7, 25: NA- Obstacles.
RWY 11: Standard with minimum climb of 340' per NM to 7800, or 2700-3 for climb in visual conditions.
RWY 29: Standard with minimum climb of 273' per NM to 7800, or 2700-3 for climb in visual conditions.

TAKE-OFF OBSTACLE NOTES:

RWY 11: Tree 505' from DER, 171' left of centerline, 100' AGL/3300' MSL.
Fence 38' from DER, 487' right of centerline, 21' AGL/3213' MSL
RWY 29: Multiple AAOs beginning 6.5 NM from DER, 1.5 NM left of centerline, up to 200' AGL/4639' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 11: Climbing right turn heading 185° to intercept MSO R-155, southeast bound to 7800, thence. . . .
or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 via MSO VOR/DME R-155, thence. . . .

TAKE-OFF RUNWAY 29: Climb via MSO R-294 to 7800, then climbing left turn via MSO R-294 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 via MSO VOR/DME R-155, thence. . . .

. . . .climbing left turn via MSO VOR/DME R-155 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

MISSOULA, MONTANA

AL-266 (FAA)

ILS RWY 11

MISSOULA INTL (MSO)

LOC I-MSO	APP CRS	Rwy Idg	9501
109.3	113°	TDZE	3200
		Apt Elev	3205

Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb direct MSO VOR/DME then climbing right turn to 8000 outbound on MSO R-152 then climbing left turn to 9000 inbound on the MSO R-152 to MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95

IAF MULLAN PASS 117.8 MLP Chan 125

15 NM

(IAF)

10500 NoPT

MSO 25 Arc

IAF KONNA 521 INE

R-340

MSA INE 25 NM

9425

9000

10900

6885

7792

MSO 25

7249

8600 113° (8)

7067

3240

5385

9600 NoPT to LOC course/MSO 25 DME 090° (47.9)

068° 248°

293°

IR-293

7996

MSO 17.1

ARLEE

10100 240° (12.5)

IR-289

7352

9000 002° (4)

ALTON

113°

9000 to Konna NDB 294° (17.1)

8620

LOCALIZER 109.3 I-MSO

7980

7094

4280

4260

3995

7447

7646

5760

4080

4450

3950

5806

6813

NAGOZ OM

113° 4.1 NM

160°

340°

R-160

MSO R-258

6719

7270

9000 to Konna NDB 294° (17.1)

MSO 25 4.4 NM

12000 to R-258

R-239

6460

RIVAL (IAF) 6524

MISSOULA 112.8 MSO Chan 75

R-152

6157

ADF or DME REQUIRED

7930

ELEV 3205 D

Fly Visual 113° 4.1 NM

TWR 3298

TDZE 3200

3250

4612 X 75

9501 X 150

25

29

Remain within 10 NM

KONNA NDB MSO 17.1

293°

9000

113°

8449

4843

NAGOZ OM

GS 3.00° TCH 45

8600

10.8 NM

0.9

MSO 112.8	MSO R-152 outbound	8000	MSO R-152 inbound	9000	MSO 112.8

Fly Visual 113° 4.1 NM

CATEGORY	A	B	C	D
S-ILS 11	4550-5 1350 (1400-5)			
S-LOC 11	NA			
CIRCLING	NA			

REIL Rwy 29

MIRL Rwy 7-25

HIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

KONNA TWO DEPARTURE

SL-266 (FAA)

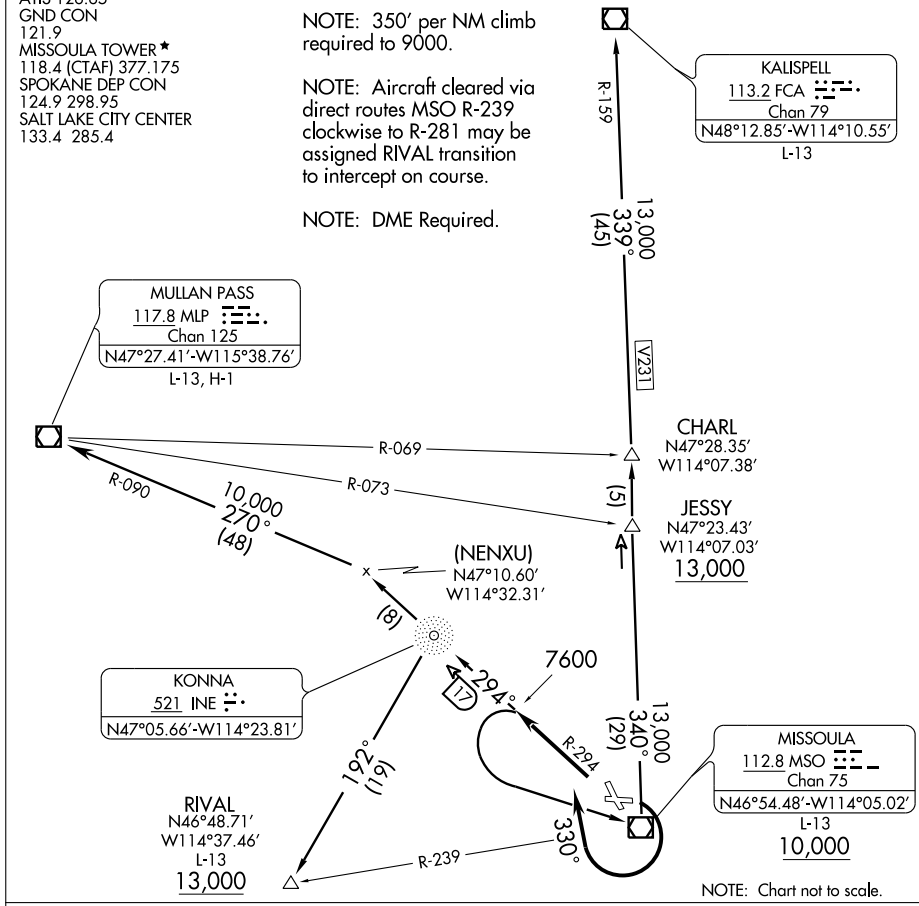
MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS 126.65
GND CON
121.9
MISSOULA TOWER ★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4

NOTE: 350′ per NM climb required to 9000.

NOTE: Aircraft cleared via direct routes MSO R-239 clockwise to R-281 may be assigned RIVAL transition to intercept on course.

NOTE: DME Required.



DEPARTURE ROUTE DESCRIPTION

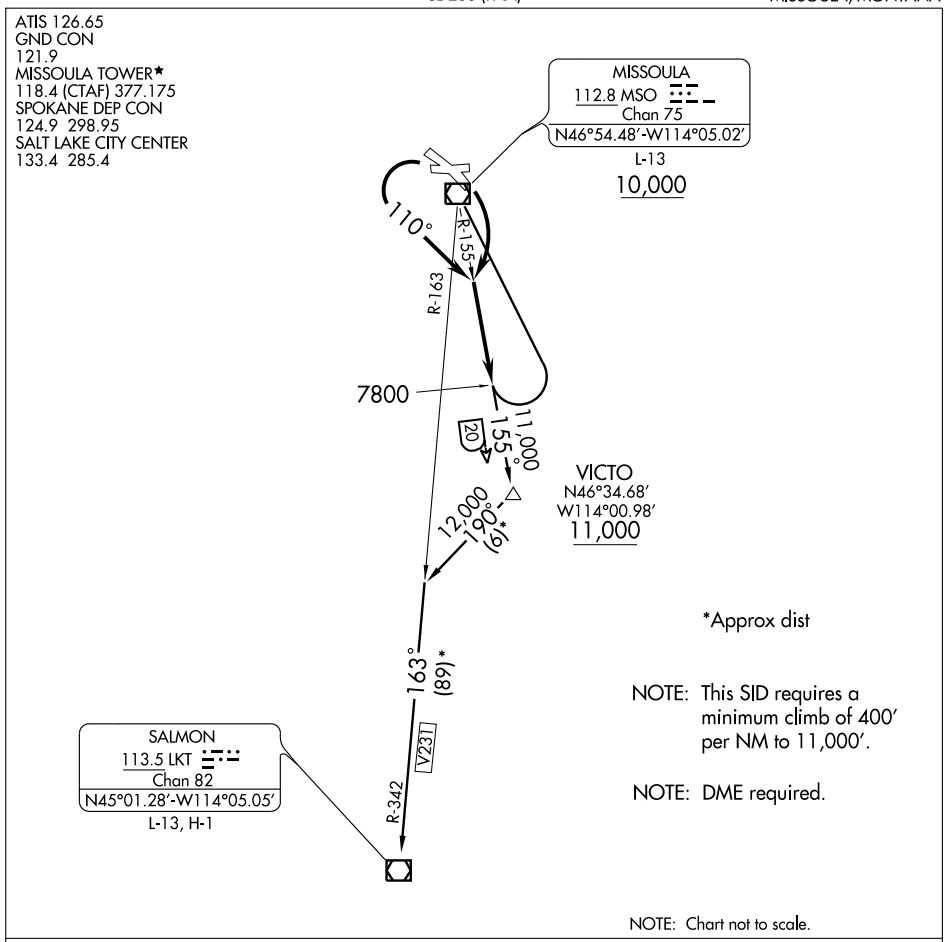
TAKE-OFF RUNWAYS 7 AND 25: Not authorized.
TAKE-OFF RUNWAY 11: Climbing right turn heading 330° to intercept MSO R-294, then climb to 7600′ via MSO R-294, then climb via (transition).
TAKE-OFF RUNWAY 29: Intercept MSO R-294 immediately after departure, then climb to 7600′ via MSO R-294, then climb via (transition).
KALISPELL TRANSITION (KONNA2.FCA): After leaving 7600′, make a climbing left turn direct MSO VOR/DME, then via V231 to FCA VOR/DME.
MISSOULA TRANSITION (KONNA2.MSO): After leaving 7600′, make a climbing left turn direct MSO VOR/DME.
MULLAN PASS TRANSITION (KONNA2.MLP): After reaching 7600′, continue on MSO R-294 and MLP R-090 to MLP VOR/DME.
RIVAL TRANSITION (KONNA2.RIVAL): After reaching 7600′, continue on MSO R-294 and INE NDB 192° bearing to RIVAL INT.

NW-1, 14 JAN 2010 to 11 FEB 2010

MZULA ONE DEPARTURE

SL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Not authorized.
TAKE-OFF RUNWAY 11: Climbing right turn to intercept MSO R-155, thence....
TAKE-OFF RUNWAY 25 OR 29: Climbing left turn heading 110° to intercept MSO R-155, thence....
....climb to 7800' via MSO R-155; thence climb via (transition).
MISSOULA TRANSITION (MZULA1.MSO): After leaving 7800', make a climbing left turn direct to MSO VOR/DME.
SALMON TRANSITION (MZULA1.LKT): After reaching 7800' continue on MSO R-155 until VICTO INT. Then via 190° heading and V231 to LKT VOR/DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 65715 W11B	APP CRS 113°	Rwy Idg 9501 TDZE 3200 Apt Elev 3206

RNAV (GPS) Y RWY 11

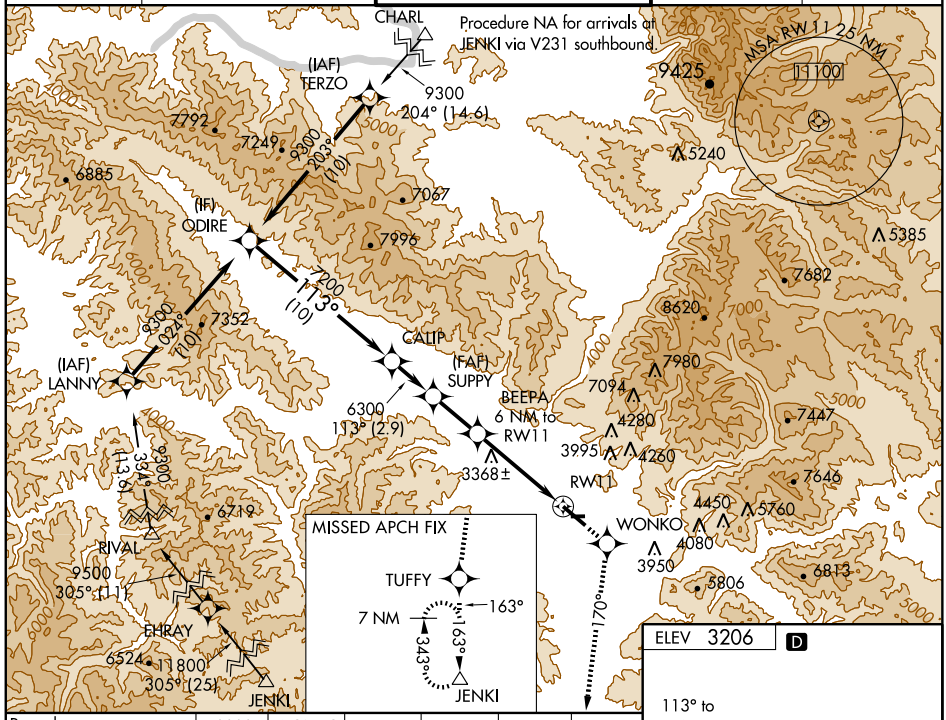
MISSOULA INTL (MSO)

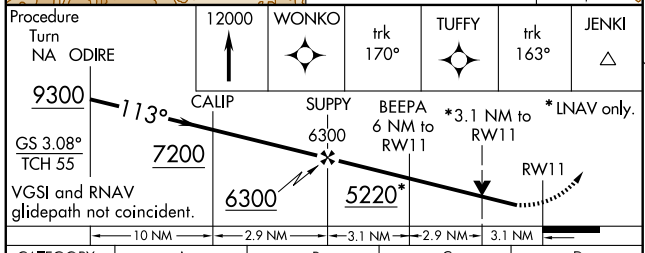
Inoperative table does not apply to LNAV % Cats. A and B. For inoperative MALSR, increase LPV visibility all Cats. to 2½ miles. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
#Missed approach requires minimum climb of 290 feet per NM to 8300.

MALSR

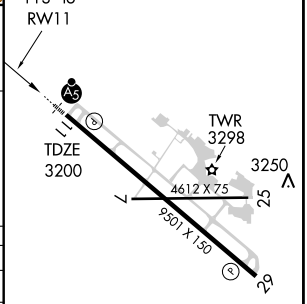
MISSED APPROACH: Climb to 12000 direct WONKO and via track 170° to TUFFY and via track 163° to JENKI and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95





CATEGORY	A	B	C	D
LPV DA#	3896-2 696 (700-2)			
LNAV MDA#	4220-¾ 1020 (1100-¾)	4220-1 1020 (1100-1)	4220-2½ 1020 (1100-2½)	
LNAV MDA%	5100-1¼ 1900 (2000-1¼)	5100-1½ 1900 (2000-1½)	5100-2½ 1900 (2000-2½)	
CIRCLING	5100-1¼ 1894 (1900-1¼)	5100-1½ 1894 (1900-1½)	5100-3 1894 (1900-3)	



REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

MISSOULA, MONTANA

AL-266 (FAA)

APP CRS	Rwy Idg	9501
294°	TDZE	3205
	Apt Elev	3205

RNAV (RNP) RWY 29

MISSOULA INTL (MSO)

RF and GPS required. When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F).
*Missed approach requires minimum climb of 215 feet per NM to 5000.

MISSED APPROACH: Climb to 11000 via track 293° to SUPPY, and via track 288° to HEDVA, and via track 293° to LOCIV, and via right turn to NEYOC, and via track 127° to ARLEE and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95

Procedure NA for arrivals on MSO VOR/DME airway radials 055 CW 163.

MISSED APPROACH

NEYOC (24.1) 127° (14.1) 160° 7 NM 340° ARLEE

LOCIV

FROM HEDVA

HEDVA 293° (8) 7352

SUPPY 288° (6.5) 293° (10.7)

7996

7682

NSA RW 29 25 NM

10900

8620

7980

7094

4280

4260

3995

7447

7645

4080 4450 5760

294° RW29 (2.6)

(IAF) MISSOULA MSO (RNP 0.50)

3950

9000 to CUPRA

106° (9.9)

6813

STOVN 017° (1.4)

(3.2)

FISIS

5806

(FAF) JEXOM

6460

6303

CUPRA Max 210 KIAS

CEBED

5600 017° (2.2)

7030

(IF) TUFFY

6000 351° (4.5)

8800 (16.1)

6425

7215

9587

6600 (8.9)

343° (9)

6600

7723

10000 247° (46.6)

PIXXI (RNP 0.50)

WAMIS Max 210 KIAS

(IAF) ROKNY 8800 246° (5)

(IAF) NOHHA

9351 9800 343° (40.2)

WEDAK (RNP 0.50)

8160

ELEV 3205 D

TWR 3298

3250

4612 X 75

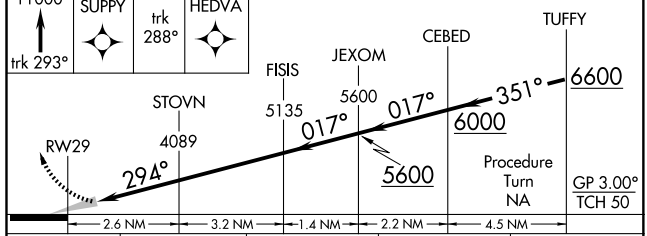
9501 X 150

TDZE 3205

294° to RW29

REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

11000 trk 293°	SUPPY	trk 288°	HEDVA



CATEGORY	A	B	C	D
RNP 0.30 DA*	3523-1 318 (400-1)			
RNP 0.30 DA	3581-1¼ 376 (400-1¼)			

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED

NW-1. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9501
113°	TDZE	3200
	Apt Elev	3206

RNAV (RNP) Z RWY 11

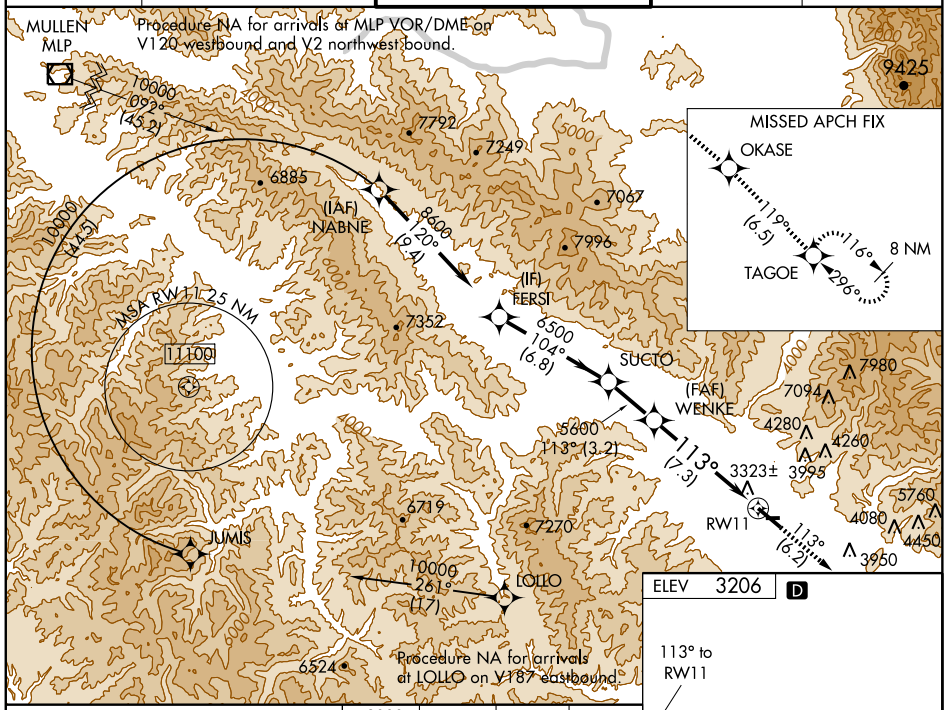
MISSOULA INTL (MSO)

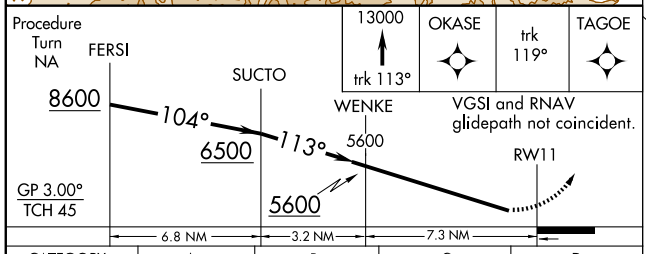
GPS required. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-6°F) or above 43°C (109°F). For inoperative MALSR increase RNP 0.12 visibility all Cats to 1¼ , RNP 0.30 visibility all Cats to 2½.
** Missed approach requires minimum climb of 425 feet per NM to 8300.
Missed approach requires minimum climb of 350 feet per NM to 8300, if unable see RNAV (GPS) Y RWY 11.

MALSR

MISSED APPROACH: Climb to 13000 via track 113° to OKASE, and via track 119° to TAGOE and hold, continue climb-in-hold to 13000.

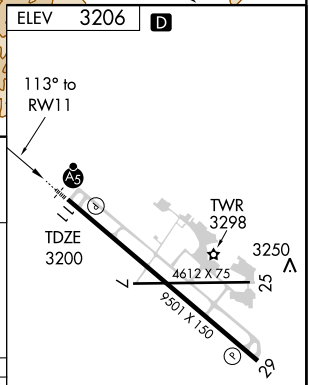
ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95





CATEGORY	A	B	C	D
RNP 0.12 DA **	3518-¾ 318 (400-¾)			
RNP 0.30 DA##	3880-2 680 (700-2)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

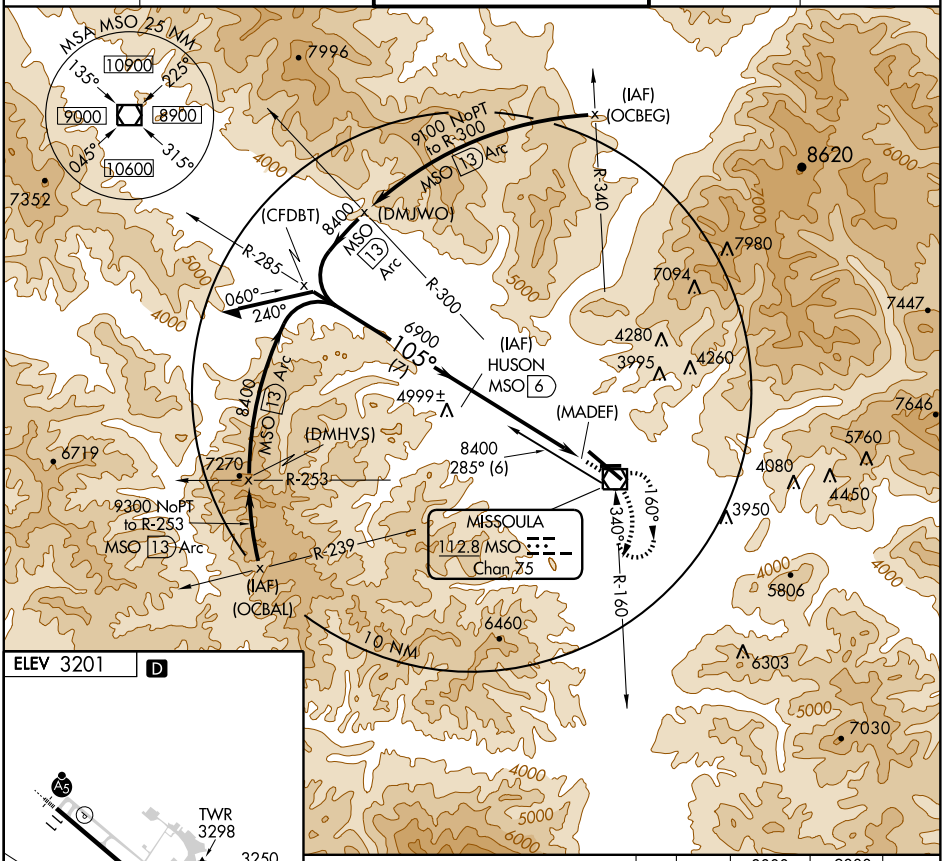
NW-1, 14 JAN 2010 to 11 FEB 2010

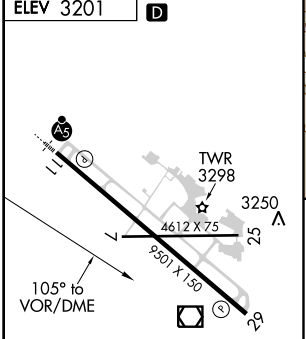
VOR/DME MSO	APP CRS	Rwy Idg	N/A
112.8	105°	TDZE	N/A
Chan 75		Apt Elev	3201

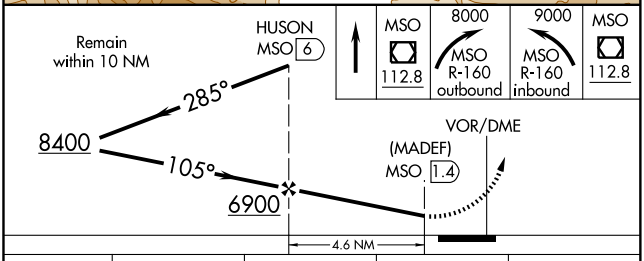
VOR/DME or GPS-A
MISSOULA INTL (MSO)

MISSED APPROACH: Climb direct to MSO VOR/DME, then climbing right turn to 8000 outbound on R-160 then climbing left turn to 9000 inbound on the R-160 to MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95







REIL Rwy 29
MIRL Rwy 7-25
HIRL Rwy 11-29 L

CATEGORY	A	B	C	D
CIRCLING	5060-1¼ 1859 (1900-1¼)	5060-1½ 1859 (1900-1½)	5060-3	1859 (1900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

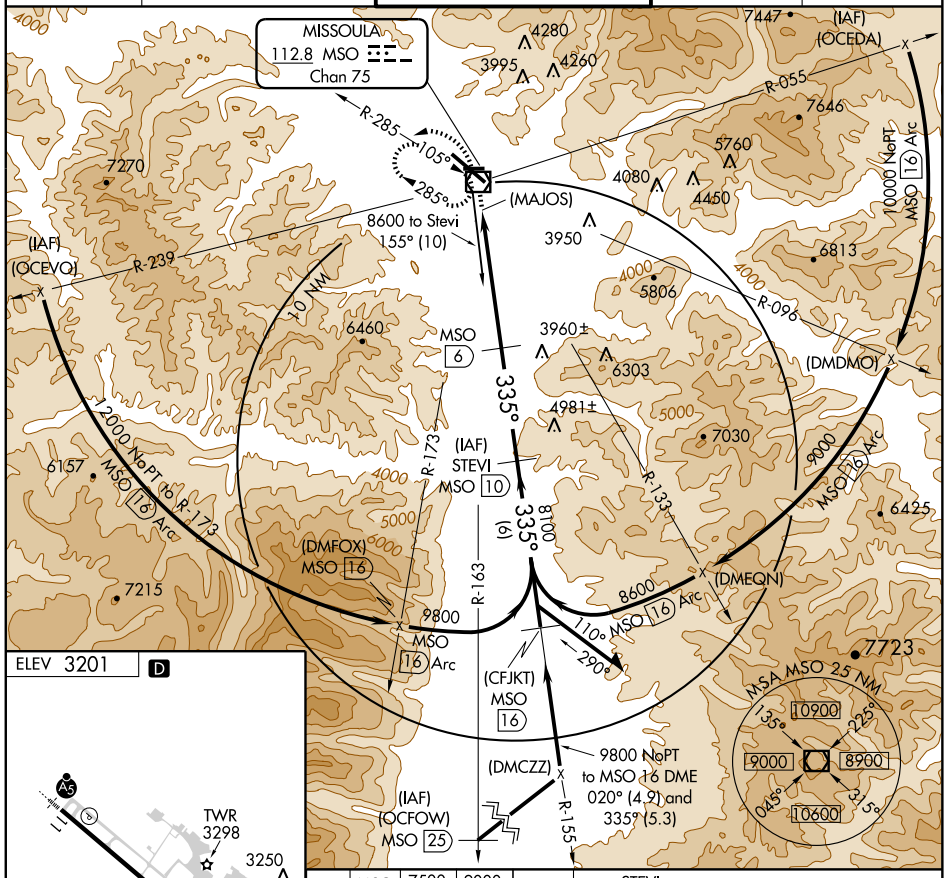
VOR/DME MSO	APP CRS	Rwy Idg	N/A
112.8	335°	TDZE	N/A
Chan 75		Apt Elev	3201

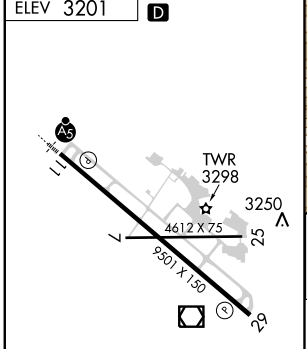
VOR/DME or GPS-B

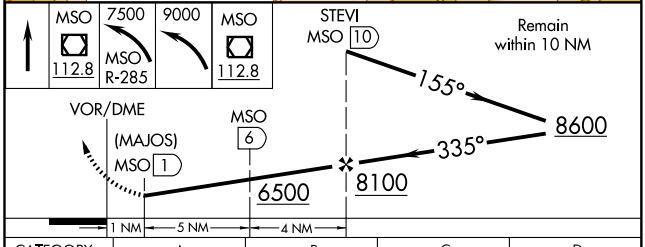
MISSOULA INTL (MSO)

MISSED APPROACH: Climb direct MSO VOR/DME, then climbing left turn to 7500 on R-285 then climbing left turn to 9000 direct MSO VOR/DME and hold.

ATIS	SPOKANE APP CON ★	MISSOULA TOWER ★	GND CON	UNICOM
126.65	124.9 298.95	118.4 (CTAF) L 377.175	121.9	122.95







CATEGORY	A	B	C	D
CIRCLING	4500-1¼ 1299 (1300-1¼)	4500-1½ 1299 (1300-1½)	4600-3 1399 (1400-3)	4740-3 1539 (1600-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

PLENTYWOOD, MONTANA AL-10315 (FAA)

APP CRS		
302°	Rwy Idg	N/A
	TDZE	N/A
	Apt Elev	2250

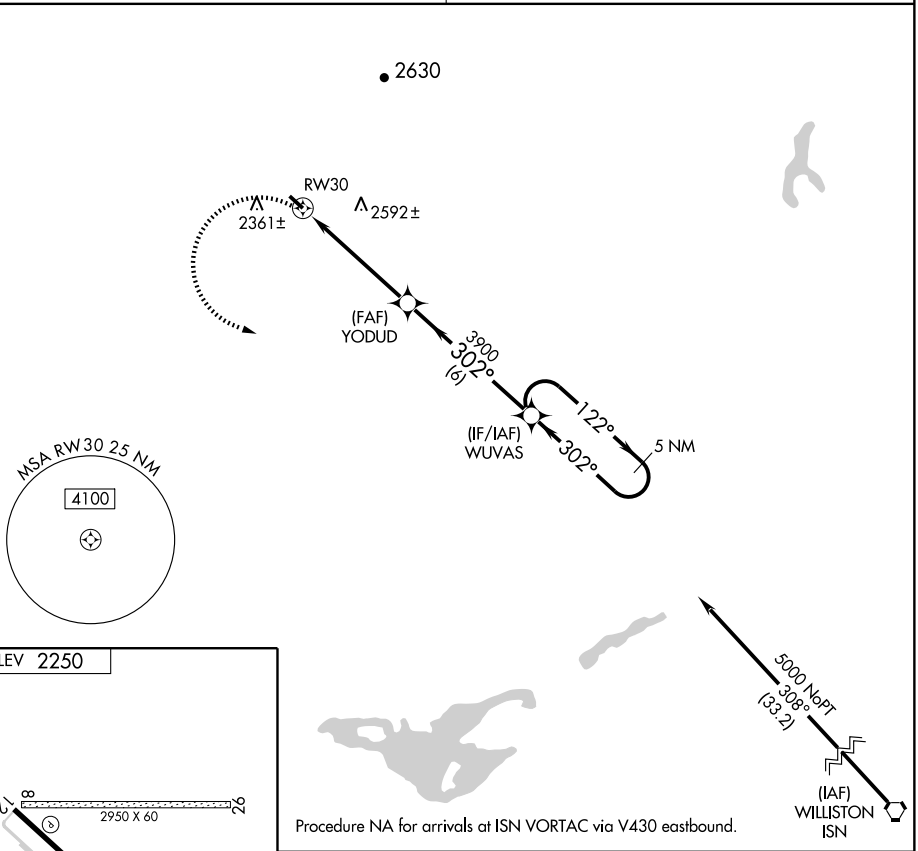
RNAV (GPS)-A

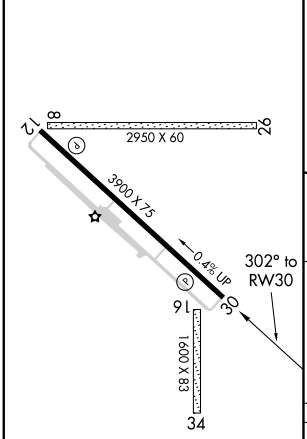
PLENTYWOOD/ SHER-WOOD (PWD)

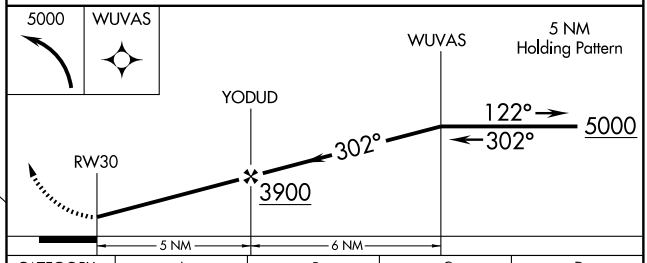
Procedure NA at night. DME/DME RNP- 0.3 NA.
Use Sloulin Fld Intl, ND altimeter setting, if not received, use Wolf Point/ L.M. Clayton altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climbing left turn to 5000 direct WUVAS and hold.

SALT LAKE CENTER	UNICOM
126.85 305.2	122.8 (CTAF) L





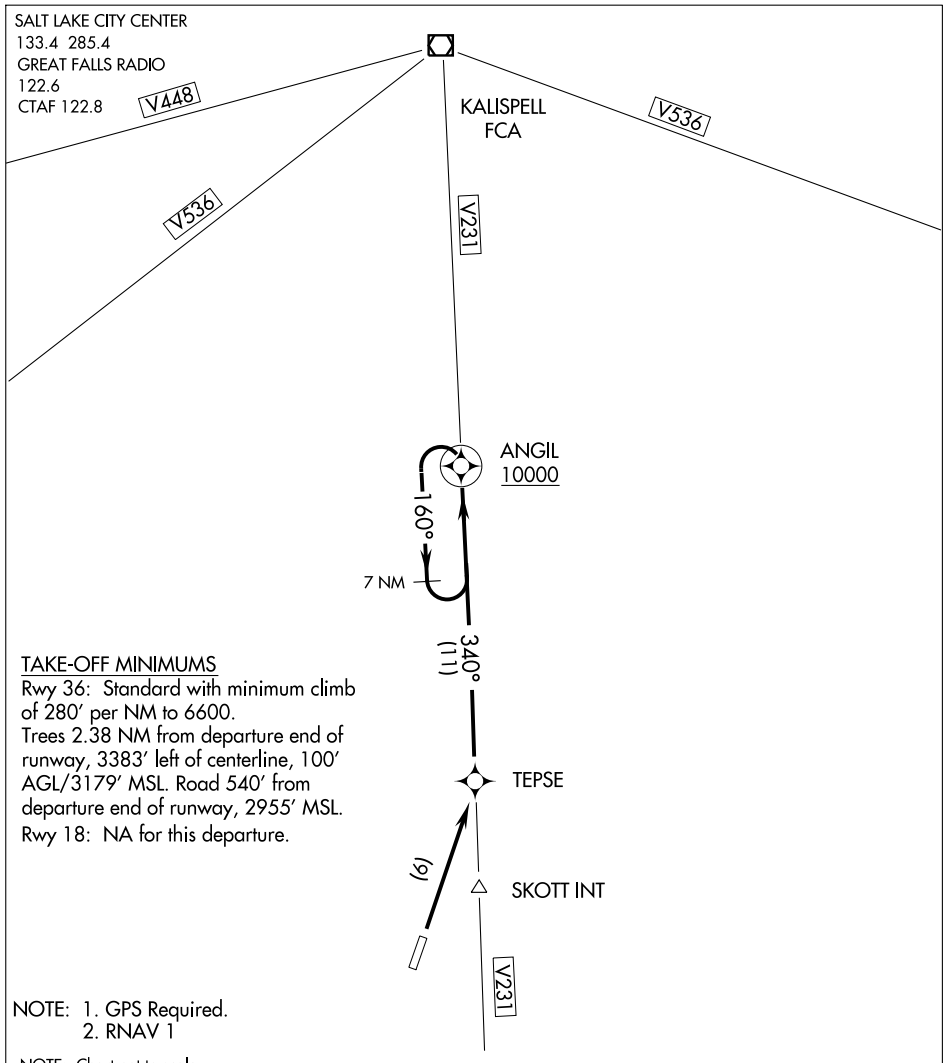


CATEGORY	A	B	C	D
CIRCLING	2840-1	590 (600-1)	NA	

MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

ANGIL ONE DEPARTURE (RNAV) (OBSTACLE)



TAKE-OFF MINIMUMS
Rwy 36: Standard with minimum climb of 280′ per NM to 6600.
Trees 2.38 NM from departure end of runway, 3383′ left of centerline, 100′ AGL/3179′ MSL. Road 540′ from departure end of runway, 2955′ MSL.
Rwy 18: NA for this departure.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 36: Climb direct to TEPSE WP, then via 340° track to ANGIL WP, Thence....

....Climb in the ANGIL WP holding pattern to cross ANGIL WP at or above 10,000 prior to proceeding on course.

POLSON, MONTANA

AL-9529 (FAA)

APP CRS	Rwy Idg	4195
182°	TDZE	2941
	Apt Elev	2941

RNAV (GPS) RWY 18

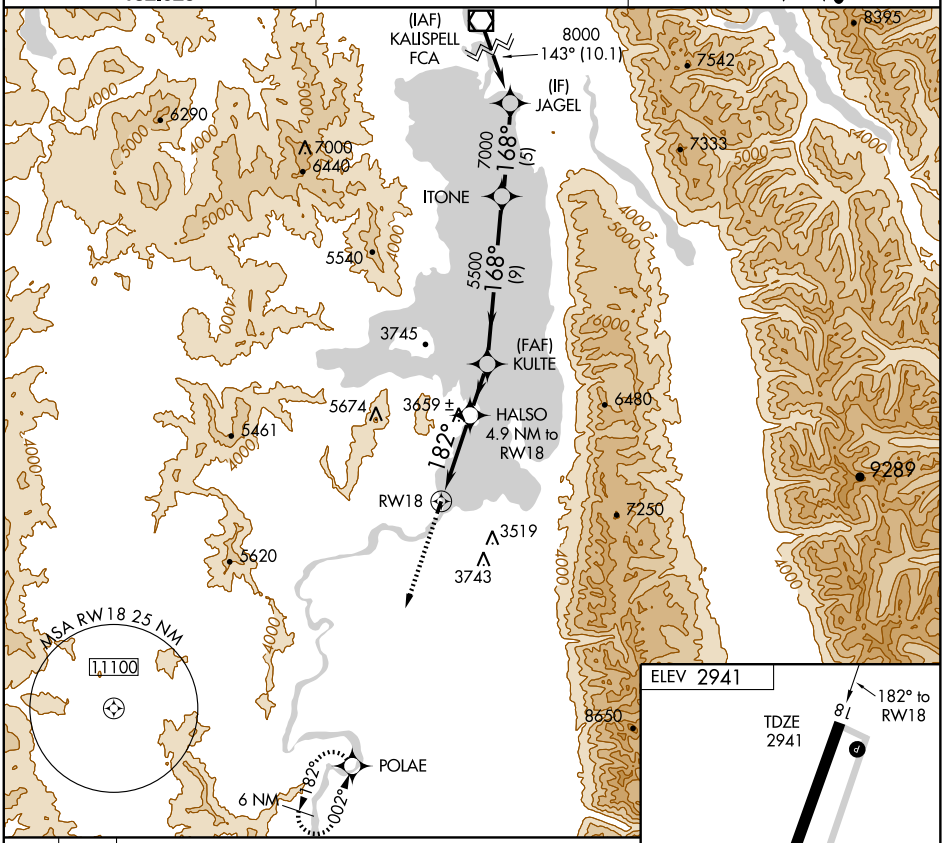
POLSON (8S1)

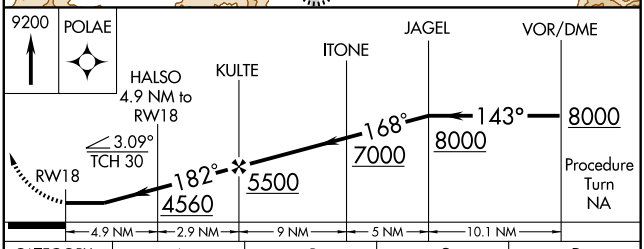
Procedure NA at night.
DME/DME RNP- 0.3 NA.
Use Glacier Park Intl altimeter setting.

NA

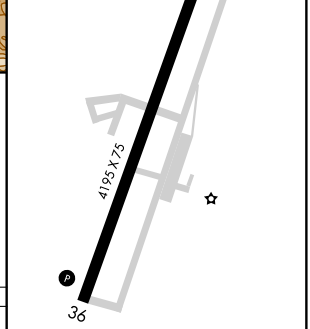
MISSED APPROACH: Climb to 9200 direct POLAE and hold.

GLACIER PARK INTL ASOS	SALT LAKE CENTER	UNICOM
132.625	133.4 285.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4480-1¼ 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	
CIRCLING	4480-1¼ 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	



MIRL Rwy 18-36 L

NW-1, 14 JAN 2010 to 11 FEB 2010

POLSON, MONTANA

AL-9529 (FAA)

RNAV (GPS) RWY 36

POLSON (8S1)

APP CRS	Rwy Idg	4195
013°	TDZE	2941
	Apt Elev	2941

Procedure NA at night.
DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 9000 direct GORTE WP and hold.

GLACIER PARK INTL ASOS	SALT LAKE CENTER	UNICOM
132.625	133.4 285.4	122.8 (CTAF) L

Procedure NA for arrival at ARLEE INT on V231 southbound and arrival at EDOBE INT on V120 westbound.

(MAP) MIGSE
3530 ±
3519
3743
BESKE 4.5 NM to MIGSE
3790 ±
(FAF) DODSE
(IAF) FABID
8500 066° (18.1) EDOBE
8100 NoPT 103° (5)
6400 013° (6)
208°
028°
6 NM
(IF/IAF) GORTE
8100 NoPT 283° (5)
(IAF) CABLI
8500 319° (18.1) ARLEE
MSA MIGSE 25 NM
11100
5620
5660
7250
8650
9820

6 NM Holding Pattern
GORTE
DODSE
BESKE 4.5 NM to MIGSE
MIGSE
8100
208°
028°
013°
3.22°
TCH 40
6400
4800
9000
GORTE
6 NM
4.7 NM
4.5 NM
0.8

CATEGORY	A	B	C	D
LNAV	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	
CIRCLING	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	

ELEV 2941

18
4195 X 75
36
TDZE 2941

MIRL Rwy 18-36 L

NW-1, 14 JAN 2010 to 11 FEB 2010

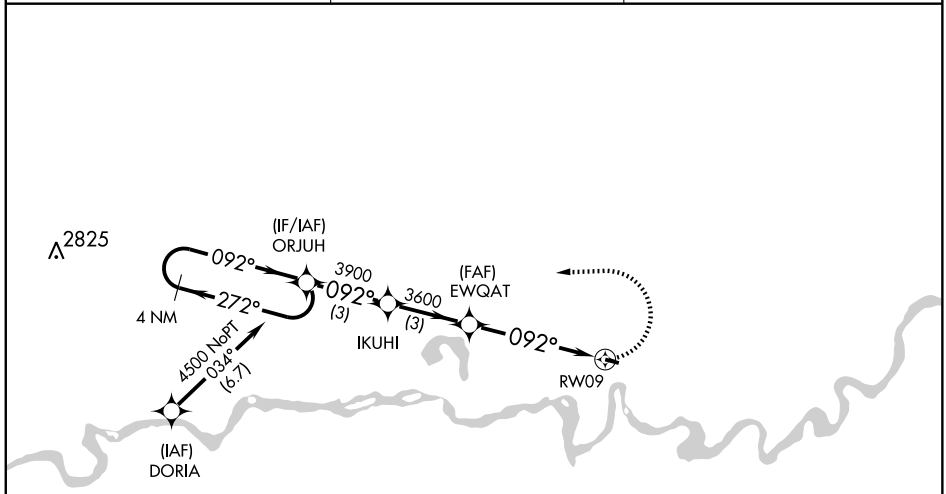
APP CRS	Rwy Idg	3030
092°	TDZE	2005
	Apt Elev	2005

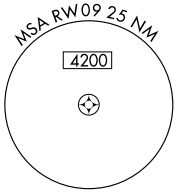
RNAV (GPS) RWY 9
POPLAR (42S)

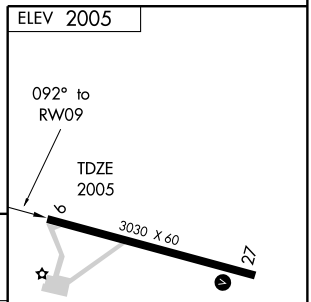
NA Use Wolf Point altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

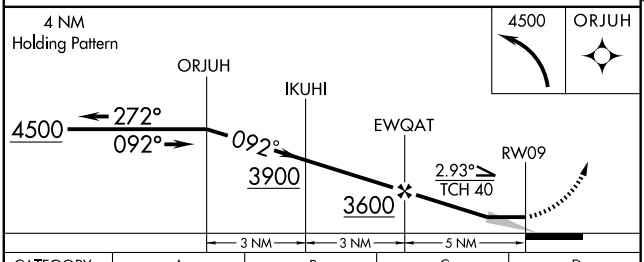
MISSED APPROACH: Climbing left turn to 4500 direct ORJUH WP and hold.

WOLF POINT ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L









CATEGORY	A	B	C	D
LNAV MDA	2480-1	475 (500-1)	NA	
CIRCLING	2500-1	495 (500-1)	NA	

MIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

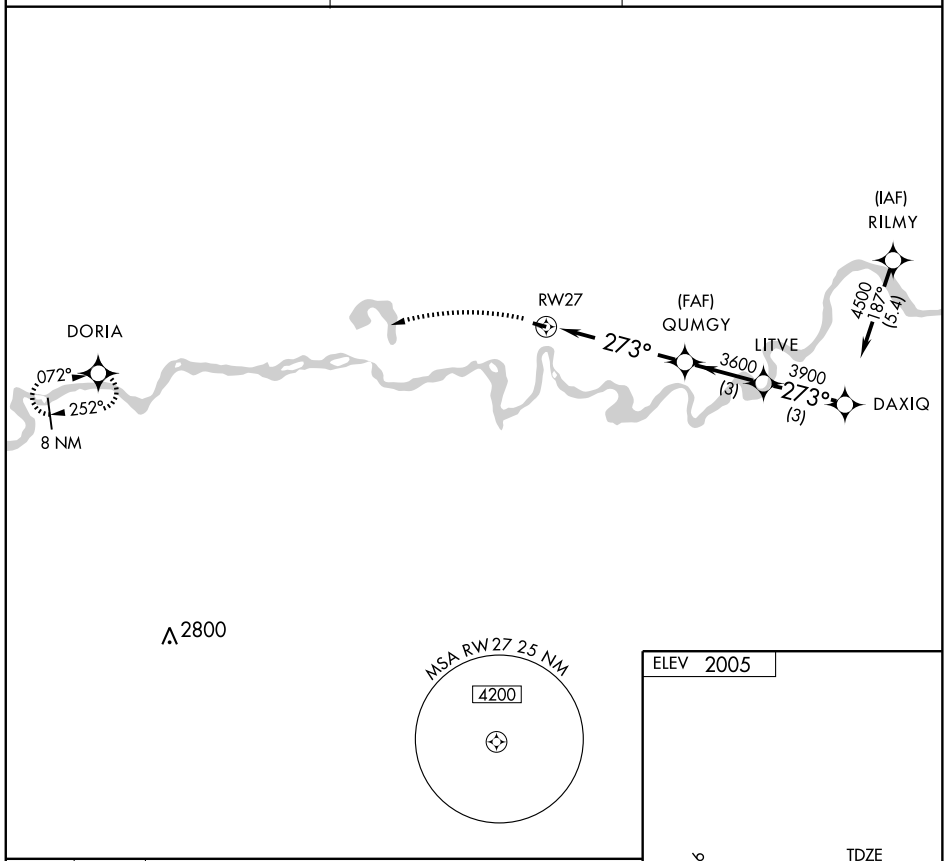
APP CRS	Rwy Idg	3030
273°	TDZE	2005
	Apt Elev	2005

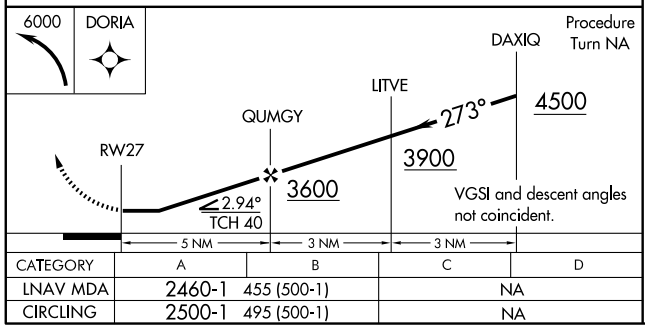
RNAV (GPS) RWY 27
POPLAR (42S)

NA Use Wolf Point altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 not authorized.

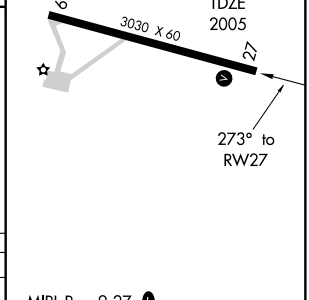
MISSED APPROACH: Climbing left turn to 6000 direct DORIA WP and hold.

WOLF POINT ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L





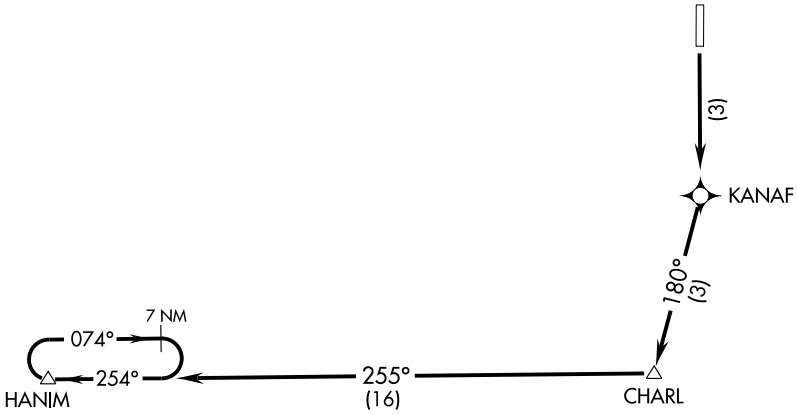
CATEGORY	A	B	C	D
LNAV MDA	2460-1	455 (500-1)	NA	
CIRCLING	2500-1	495 (500-1)	NA	



NW-1, 14 JAN 2010 to 11 FEB 2010

HANIM ONE DEPARTURE (RNAV)

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8



NOTE: RNAV 1.

NOTE: GPS required.

TAKE-OFF MINIMUMS:
Rwy 16: Standard.
Rwy 34: NA. See RONAN DEPARTURE.

TAKE-OFF OBSTACLE NOTE:
Rwy 16: Tree 485′ from DER, 386′ left of centerline, 50′ AGL/3149′ MSL.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 13000 direct KANAF and via track 180° to CHARL and via track 255° to HANIM and hold, continue climb-in-hold to 13000 before proceeding on course.

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 16

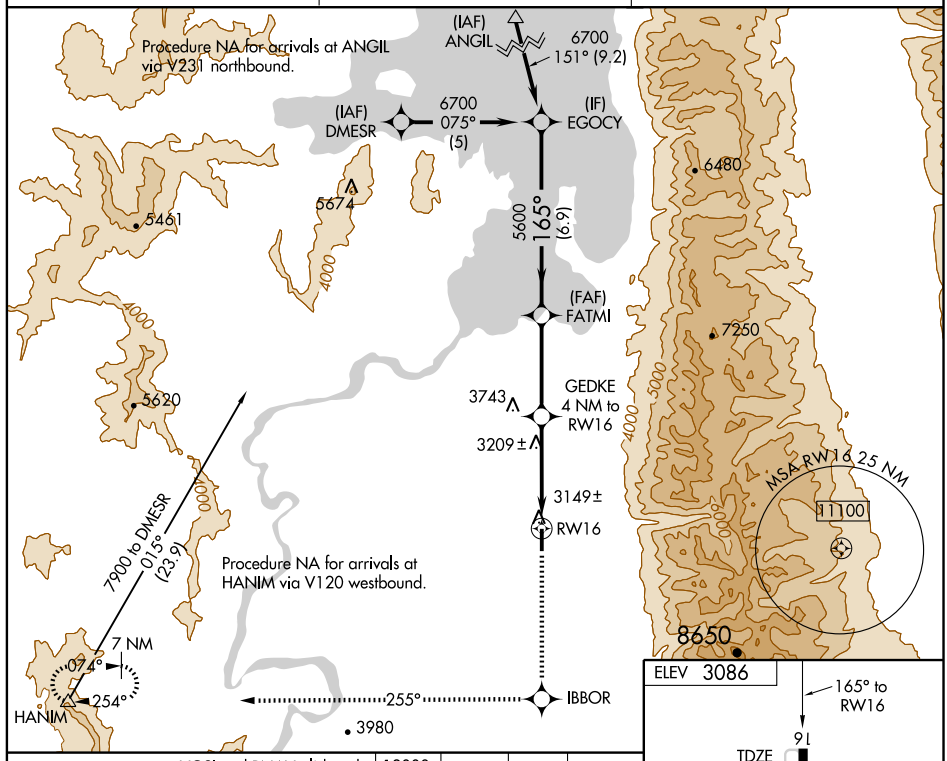
RONAN (7SØ)

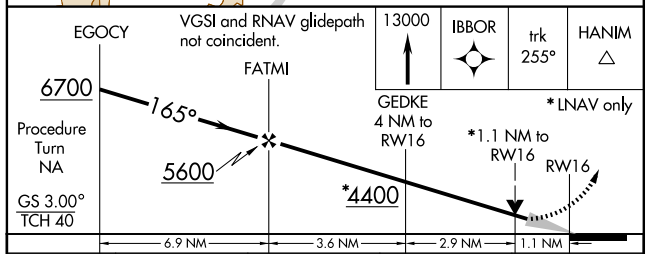
WAAS CH 45814 W16A	APP CRS 165°	Rwy Idg 4800 TDZE 3086 Apt Elev 3086

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). Circling NA east of Rwys 16 and 34. DME/DME RNP- 0.3 NA.

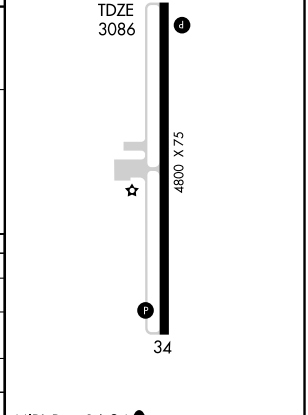
MISSED APPROACH: Climb to 13000 direct IBBOR and via track 255° to HANIM and hold, continue climb-in-hold to 13000.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	3386-1 300 (300-1)		NA	
LNAV/VNAV DA	3531-1½ 445 (500-1½)		NA	
LNAV MDA	3460-1 374 (400-1)		NA	
CIRCLING	3460-1 374 (400-1)	3540-1 454 (500-1)	NA	



MIRL Rwy 16-34 L

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 34

RONAN (7S0)

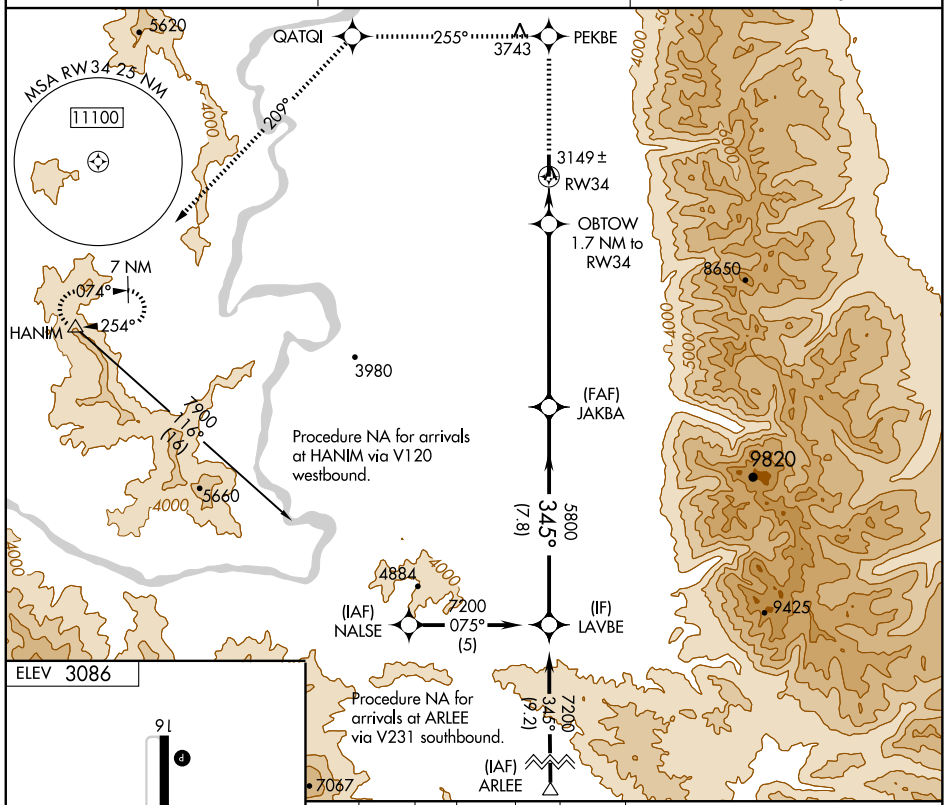
WAAS	APP CRS	Rwy Idg	4800
CH 86614	345°	TDZE	3081
W34A		Apt Elev	3086

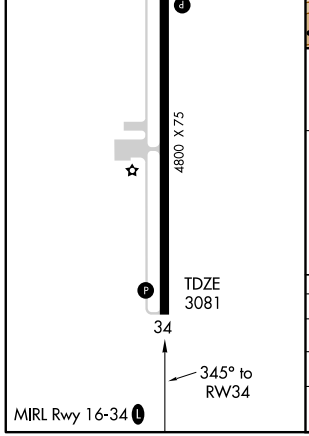
T
NA

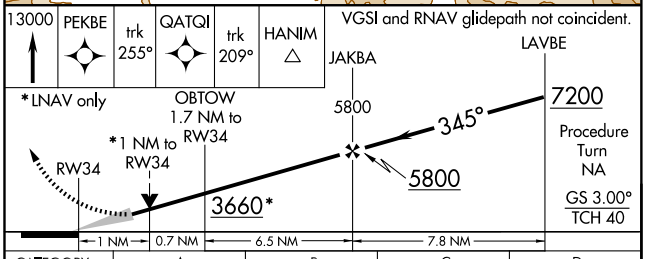
Circling NA east of Rwys 16 and 34.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 13000 direct PEKBE and via track 255° to QATQI and via track 209° to HANIM and hold, continue climb-in-hold to 13000.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF) L







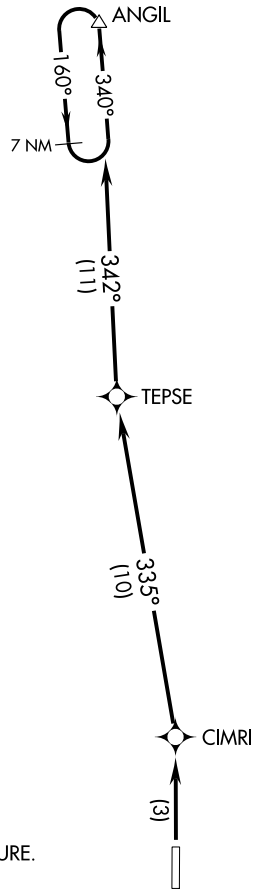
CATEGORY	A	B	C	D
LPV DA	3392-1 311 (400-1)		NA	
LNAV MDA	3400-1 319 (400-1)		NA	
CIRCLING	3460-1 374 (400-1)	3540-1 454 (500-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

RONAN ONE DEPARTURE (RNAV)

SL-9978 (FAA)

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8



NOTE: RNAV 1.

NOTE: GPS required.

TAKE-OFF MINIMUMS:
Rwy 16: NA. See HANIM ONE DEPARTURE.
Rwy 34: Standard.

TAKE-OFF OBSTACLE NOTES:
Rwy 34: Building 158′ from DER, 370′ left of centerline, 40′ AGL/3130′ MSL.
Tree 1358′ from DER, 556′ left of centerline, 50′ AGL/3149′ MSL.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

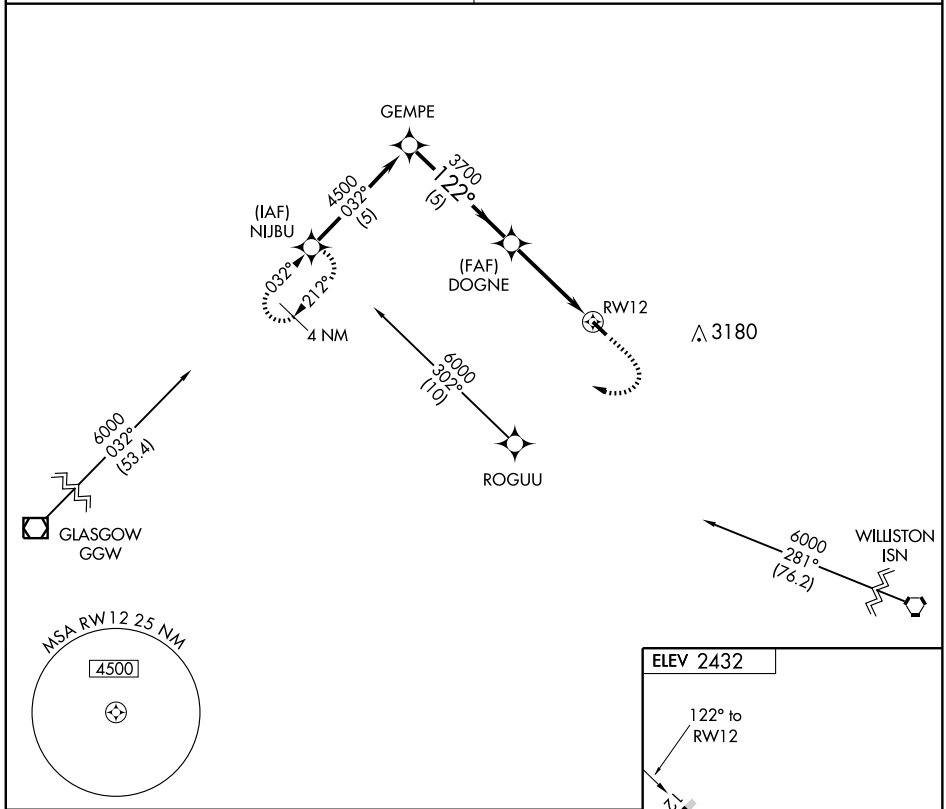
TAKE-OFF RUNWAY 34: Climb to 10000 direct CIMRI and via track 335° to TEPSE and via track 342° to ANGIL and hold, continue climb-in-hold to appropriate MEA before proceeding on course.

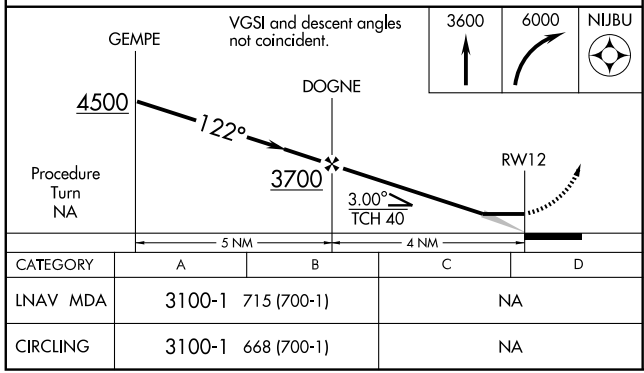
NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS		
122°	Rwy Idg	4015
	TDZE	2385
	Apt Elev	2432

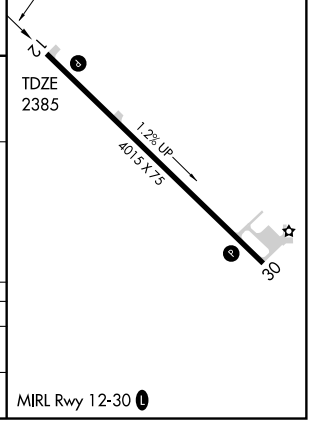
RNAV (GPS) RWY 12
SCOBEY (9S2)

▼ GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. ⚠ NA Use Wolf Point altimeter setting; when not received procedure not authorized.	MISSED APPROACH: Climb to 3600 then climbing right turn to 6000 direct NIJBU WP and hold.
SALT LAKE CITY CENTER **126.85 305.2**	UNICOM **122.8** (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	3100-1	715 (700-1)	NA	
CIRCLING	3100-1	668 (700-1)	NA	



MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

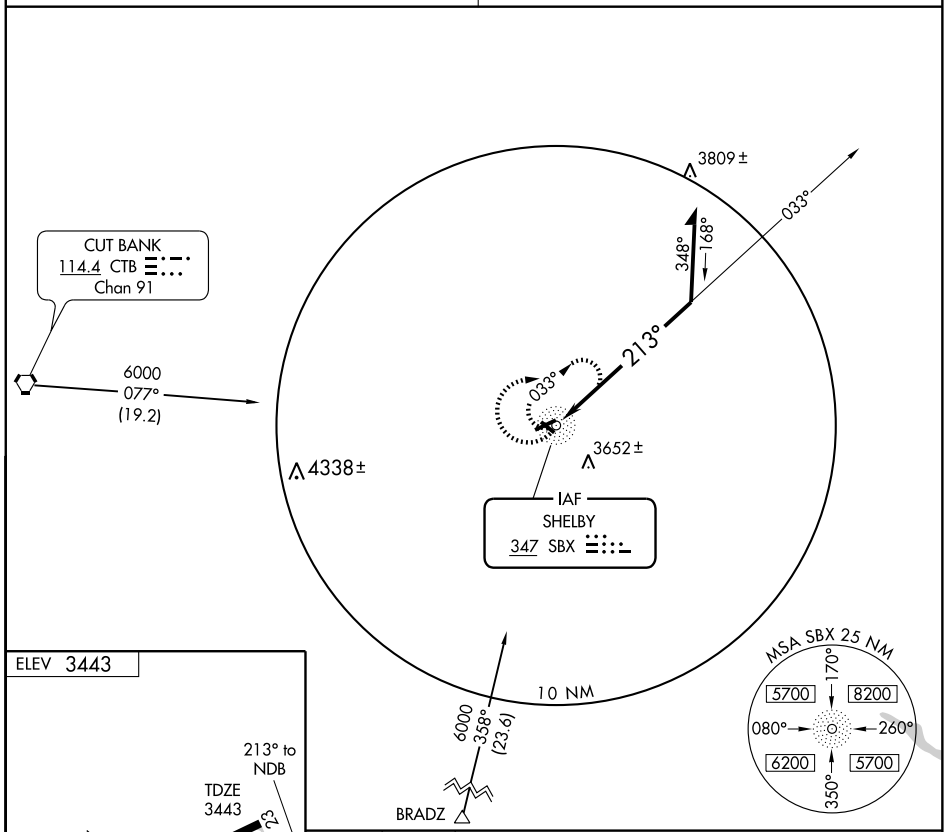
NDB SBX 347	APP CRS 213°	Rwy Idg 5004 TDZE 3443 Apt Elev 3443

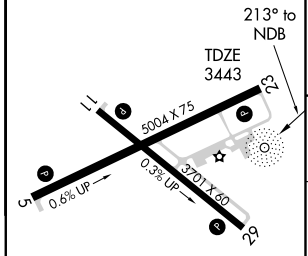
NDB RWY 23
SHELBY (SBX)

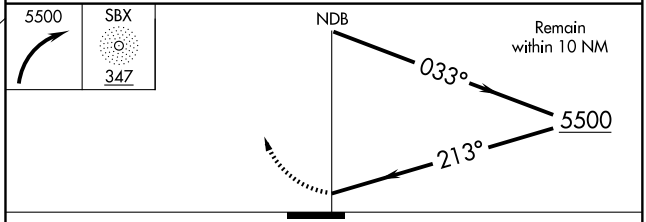
T NA Visibility reduction by helicopters NA. Use Cut Bank altimeter setting, if not received, use Great Falls altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing right turn to 5500 in SBX NDB holding pattern.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-23	4240-1 797 (800-1)	4240-1¼ 797 (800-1¼)	4240-2¼ 797 (800-2¼)	NA
CIRCLING	4240-1 797 (800-1)	4240-1¼ 797 (800-1¼)	4240-2¼ 797 (800-2¼)	NA

MIRL Rwys 5-23 and 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

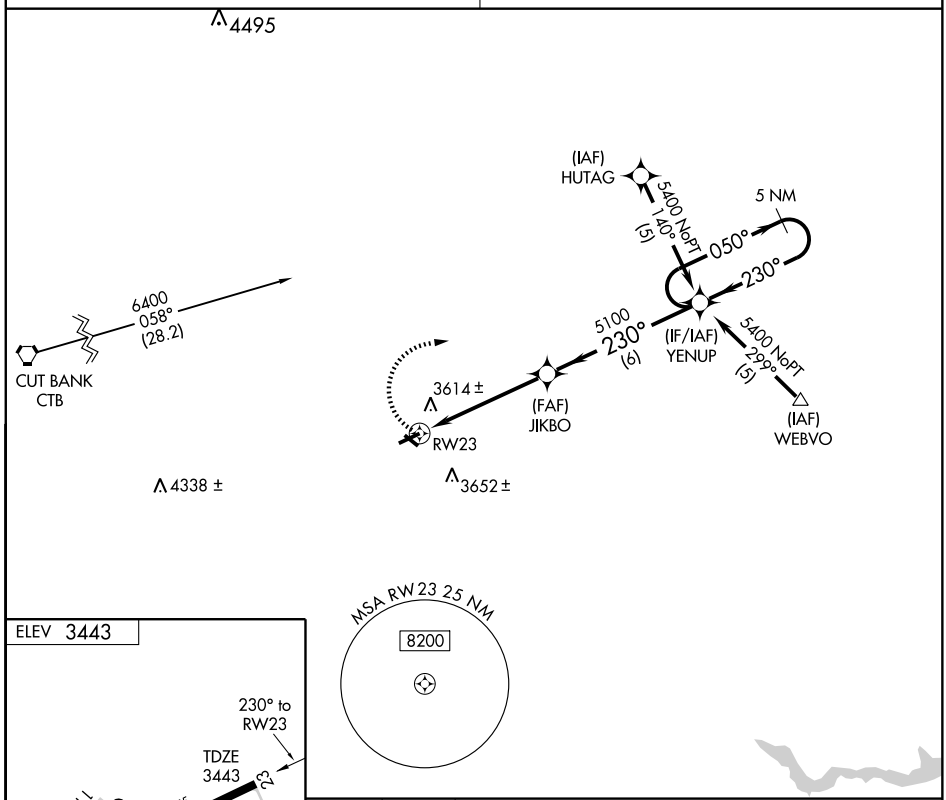
APP CRS		
230°	Rwy Idg	5004
	TDZE	3443
	Apt Elev	3443

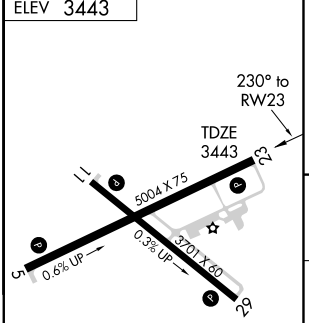
RNAV (GPS) RWY 23
SHELBY (SBX)

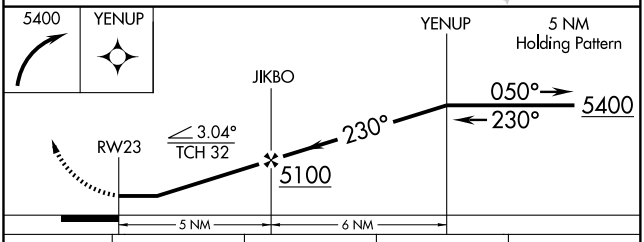
DME/DME RNP- 0.3 NA.
Circling NA at night.
NA Visibility reduction by helicopters NA.
Use Cut Bank altimeter setting, if not received, use Great Falls altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing right turn to 5400 direct YENUP and hold.

SALT LAKE CITY CENTER	UNICOM
133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4060-1	617 (700-1)	4060-1¾ 617 (700-1¾)	NA
CIRCLING	4120-1	677 (700-1)	4120-2 677 (700-2)	NA

MIRL Rwys 5-23 and 11-29 L

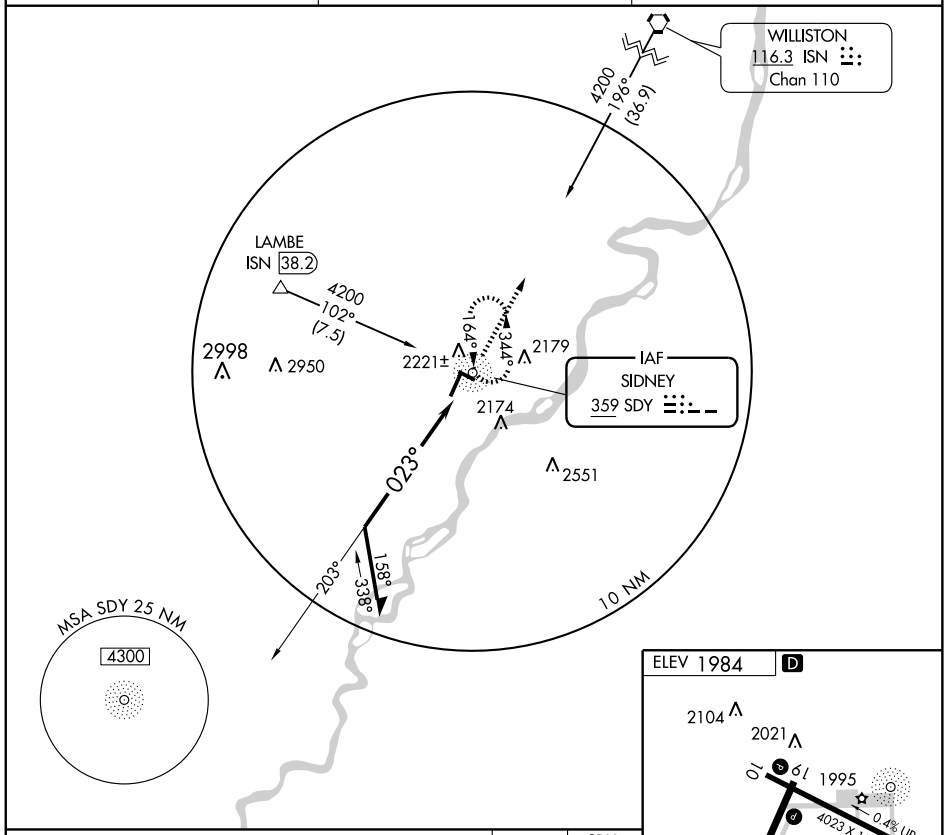
NDB SDY 359	APP CRS 023°	Rwy Idg 5705 TDZE 1984 Apt Elev 1984

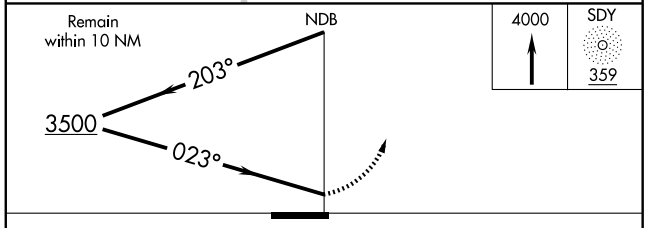
NDB RWY 1

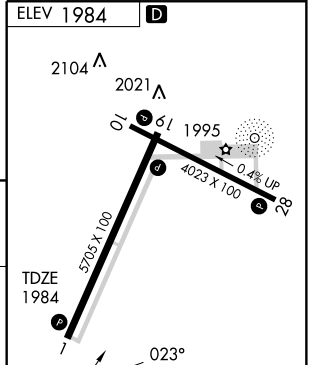
SIDNEY-RICHLAND MUNI (SDY)

MISSED APPROACH: Climb to 4000 then direct SDY NDB and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-1	2720-1	736 (800-1)	2720-2 736 (800-2)	2720-2¼ 736 (800-2¼)
CIRCLING	2720-1	736 (800-1)	2720-2 736 (800-2)	2720-2¼ 736 (800-2¼)

REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

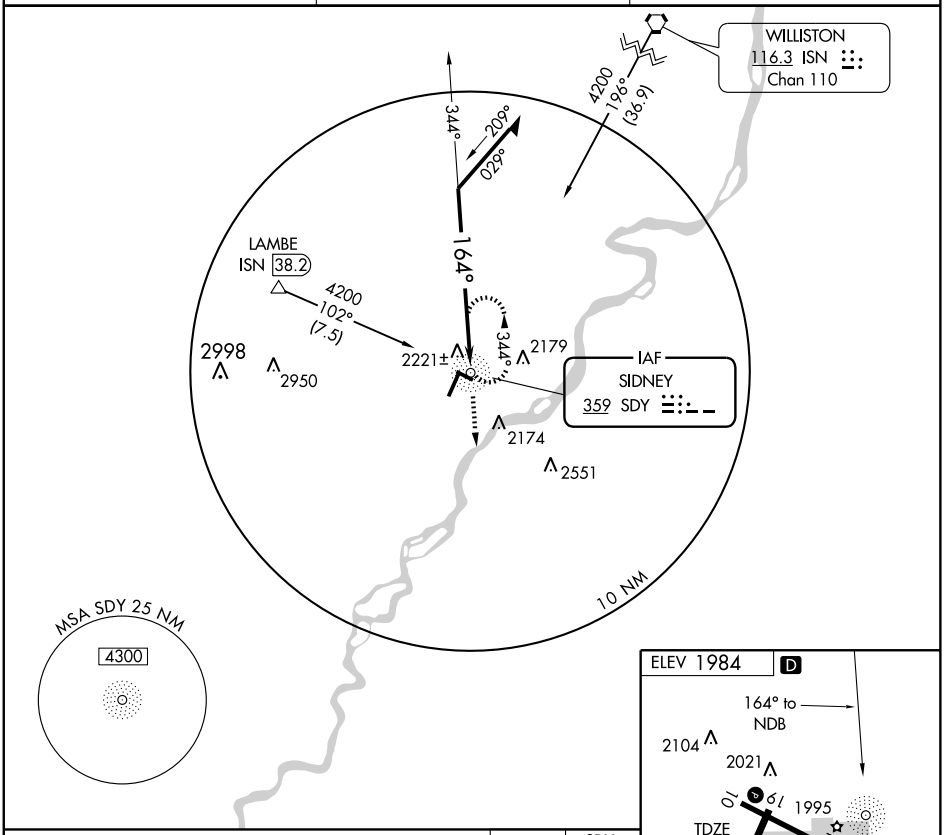
NDB SDY 359	APP CRS 164°	Rwy Idg 5705 TDZE 1979 Apt Elev 1984

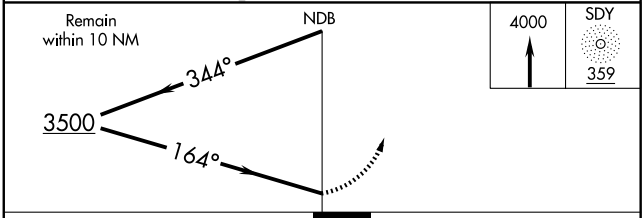
NDB RWY 19

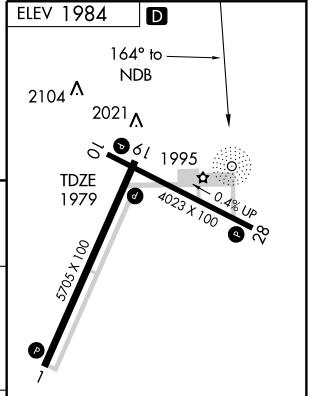
SIDNEY-RICHLAND MUNI (SDY)

MISSED APPROACH: Climb to 4000 then direct SDY NDB and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-19	2780-1 801 (800-1)	2780-1¼ 801 (800-1¼)	2780-2¼ 801 (800-2¼)	2780-2½ 801 (800-2½)
CIRCLING	2780-1 796 (800-1)	2780-1¼ 796 (800-1¼)	2780-2¼ 796 (800-2¼)	2780-2½ 796 (800-2½)

REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

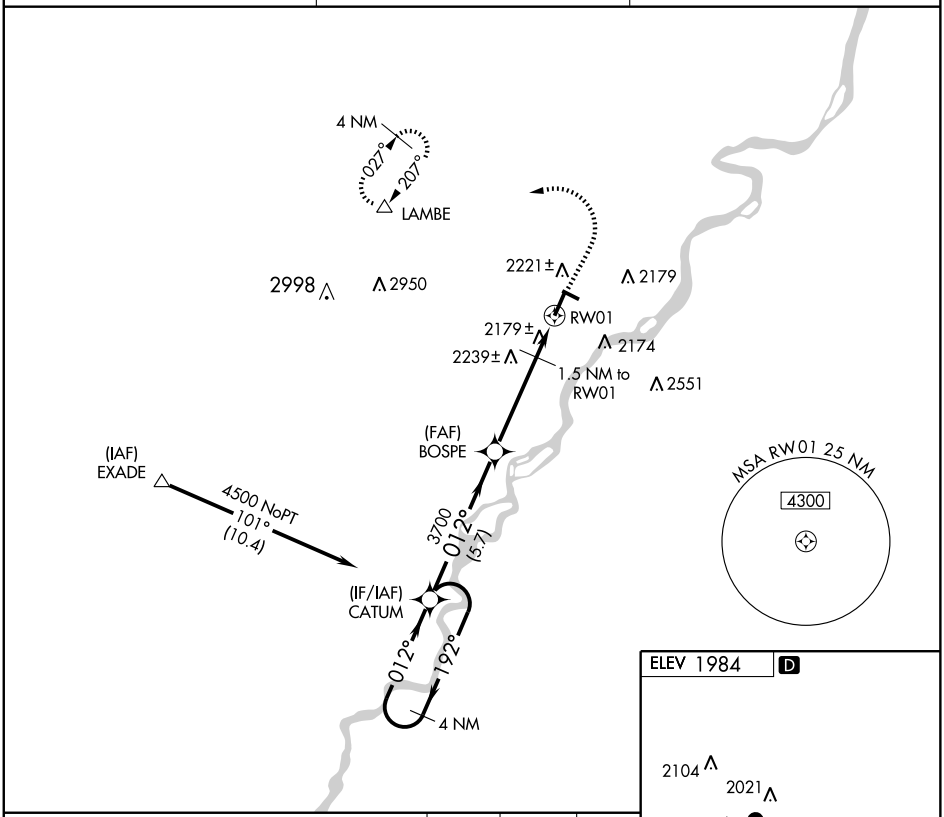
APP CRS	Rwy Idg	5705
012°	TDZE	1984
	Apt Elev	1984

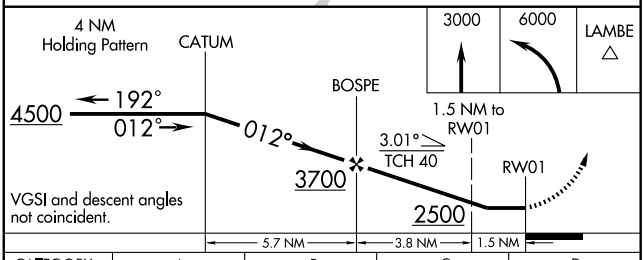
RNAV (GPS) RWY 1
SIDNEY-RICHLAND MUNI (SDY)

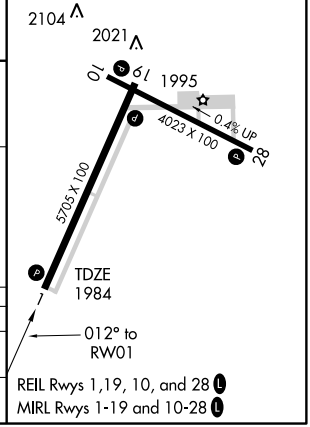
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3000 then climbing left turn to 6000 direct LAMBE WP and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2440-1	456 (500-1)	2440-1¼ 456 (500-1¼)	2440-1½ 456 (500-1½)
CIRCLING	2620-1 636 (700-1)	2640-1 656 (700-1)	2680-2 696 (700-2)	2700-2¼ 716 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5705
192°	TDZE	1979
	Apt Elev	1984

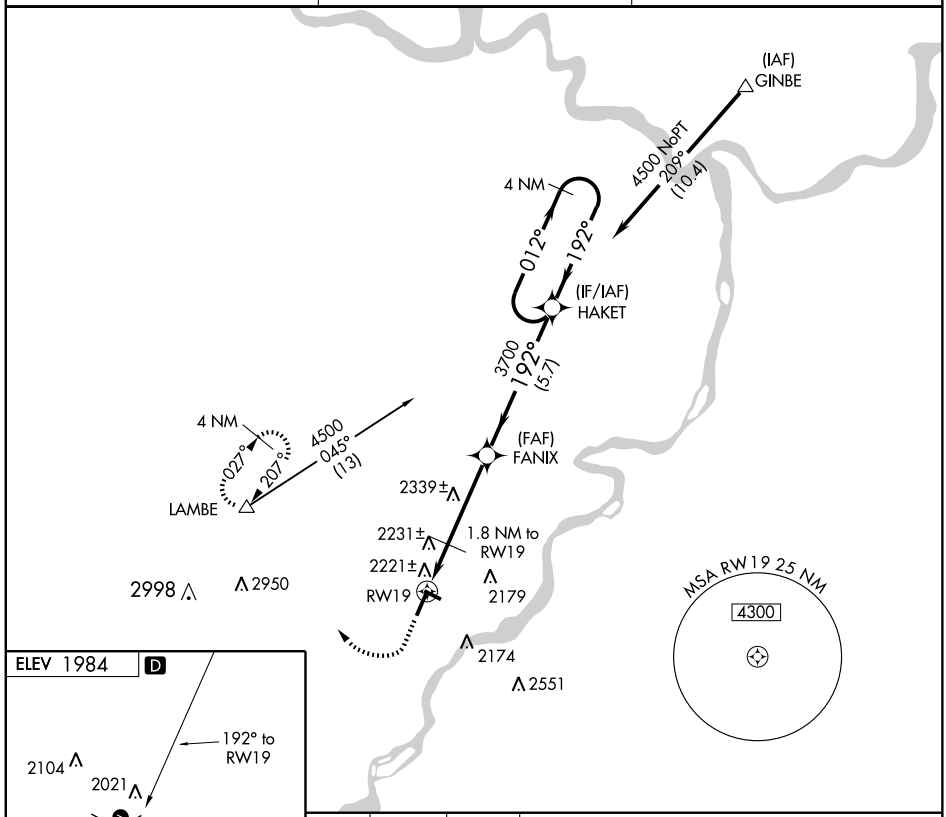
RNAV (GPS) RWY 19

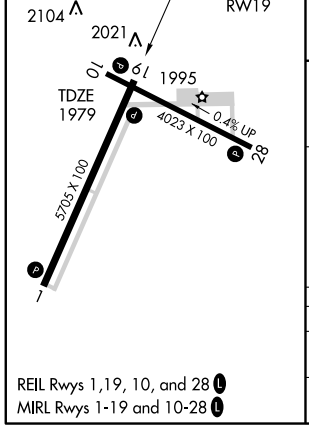
SIDNEY-RICHLAND MUNI (SDY)

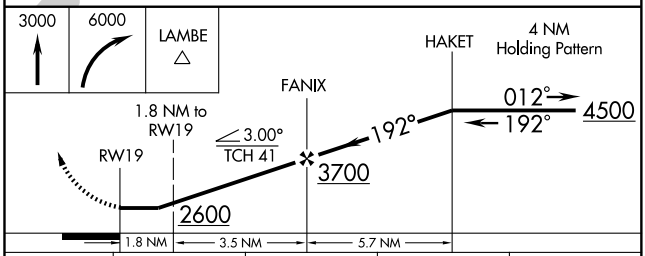
T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3000 then climbing right turn to 6000 direct LAMBE WP and hold.

AWOS-3	GREAT FALLS RADIO	UNICOM
119.275	123.65	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2500-1	521 (600-1)	2500-1½ 521 (600-1½)	2500-1¾ 521 (600-1¾)
CIRCLING	2620-1 636 (700-1)	2640-1 656 (700-1)	2680-2 696 (700-2)	2700-2¼ 716 (800-2¼)

REIL Rwys 1,19, 10, and 28 L
MIRL Rwys 1-19 and 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

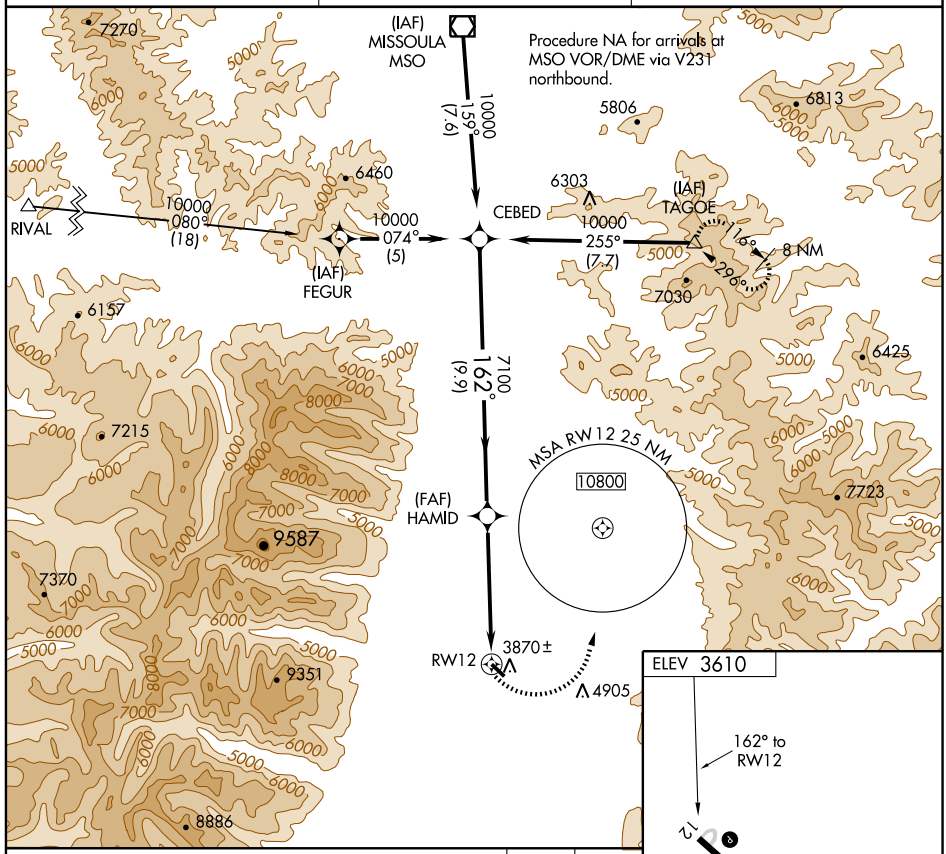
APP CRS	Rwy Idg	N/A
162°	TDZE	N/A
	Apt Elev	3610

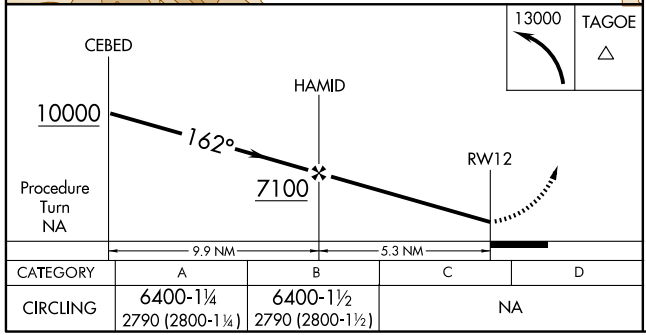
RNAV (GPS)-A
STEVENSVILLE (32S)

DME/DME RNP- 0.3 NA.
Use Missoula Intl altimeter setting.
Circling NA at night to Rwy 30.

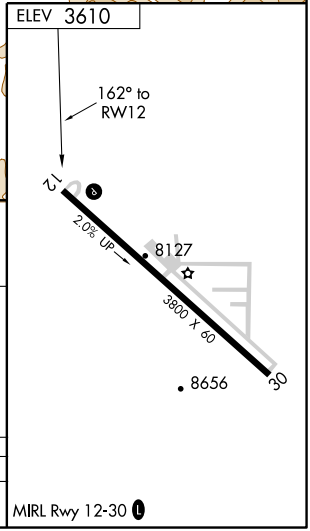
MISSED APPROACH: Climbing left turn to 13000 direct TAGOE WP and hold.

MISSOULA ASOS	SPOKANE APP CON ★	UNICOM
126.65	124.9 298.95	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	6400-1¼ 2790 (2800-1¼)	6400-1½ 2790 (2800-1½)	NA	



MIRL Rwy 12-30 L

LOC I-LOW	APP CRS	Rwy Idg	8399
110.7	010°	TDZE	6644
		Apt Elev	6644

ILS or LOC RWY 1

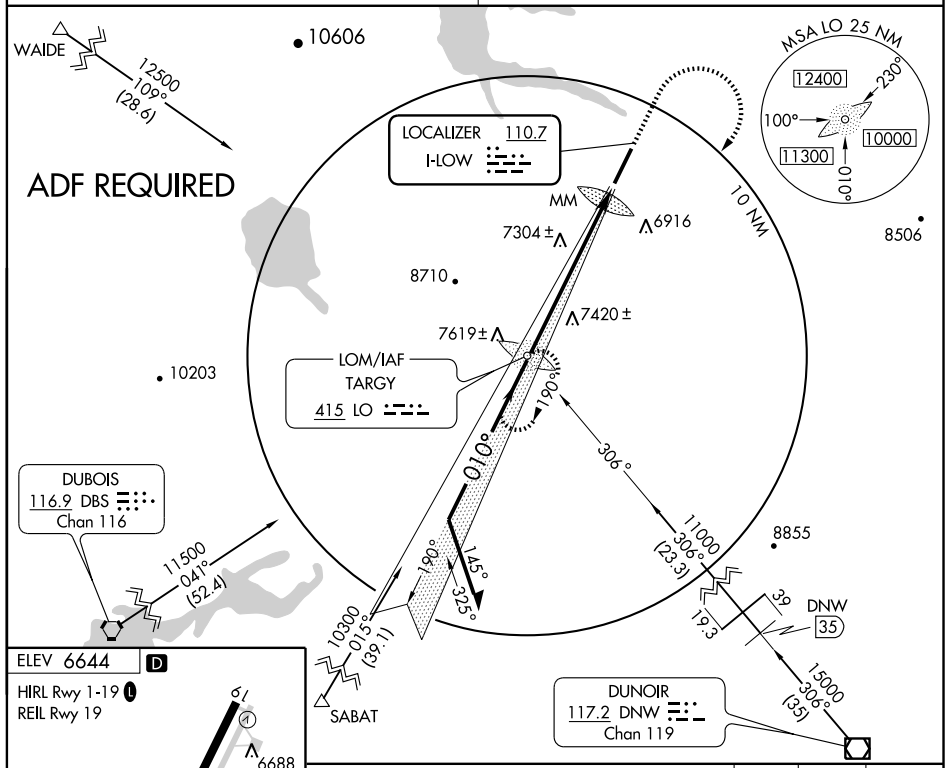
WEST YELLOWSTONE/YELLOWSTONE (WYS)

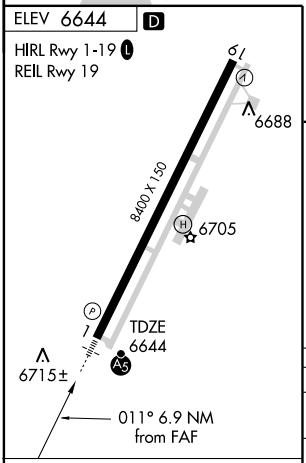
T NA — If local altimeter setting not received, procedure not authorized.

MALSR

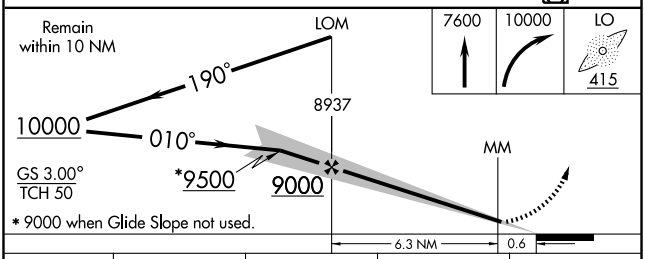
MISSED APPROACH: Climb to 7600, then climbing right turn to 10000 direct LO LOM and hold.

SALT LAKE CENTER	UNICOM
132.4 338.3	123.0 (CTAF) L





FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-ILS 1	6844-½ 200 (200-½)			
S-LOC 1	7720-¾ 1076 (1100-¾)	7720-1 1076 (1100-1)	7720-2½ 1076 (1100-2½)	
CIRCLING	7720-1¼ 1076 (1100-1¼)	7720-1½ 1076 (1100-1½)	7720-3 1076 (1100-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM LO	APP CRS	Rwy Idg	8399
415	011°	TDZE	6644
		Apt Elev	6644

NDB or GPS RWY 1

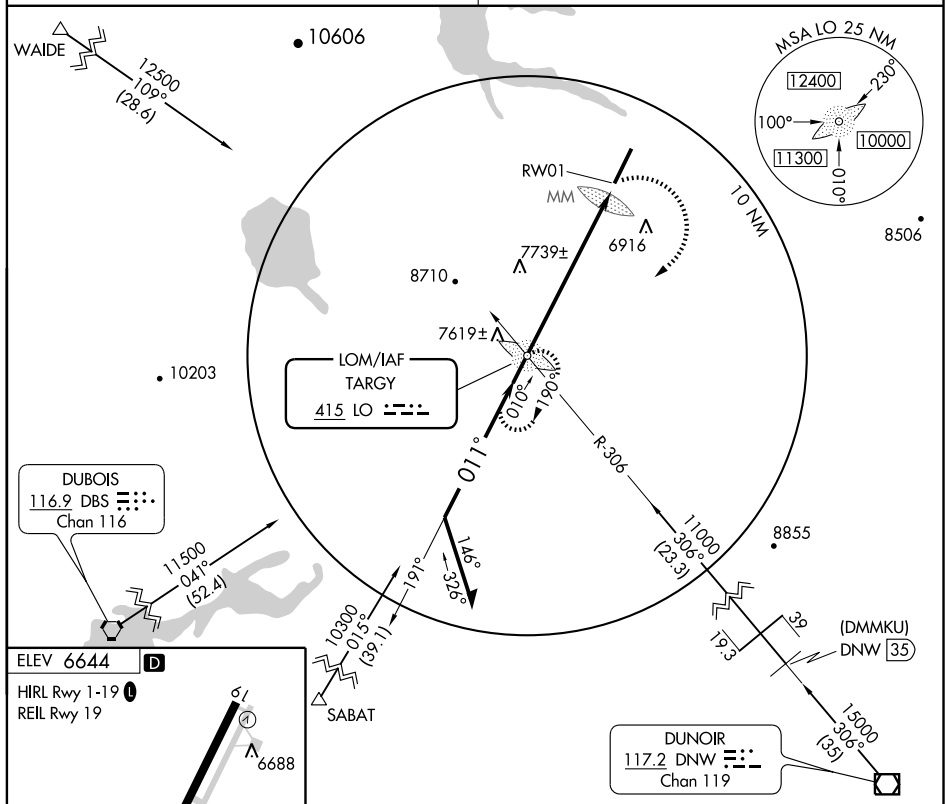
WEST YELLOWSTONE/YELLOWSTONE (WYS)

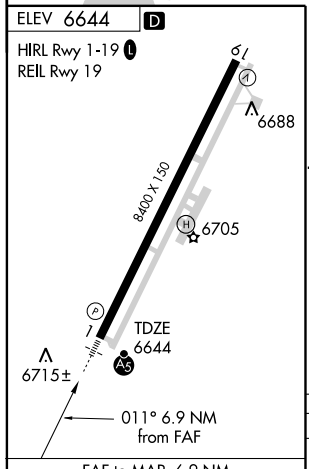
If local altimeter setting not received, procedure not authorized. Categories A and B, S-1 visibility increased ½ mile for inoperative MALSR.

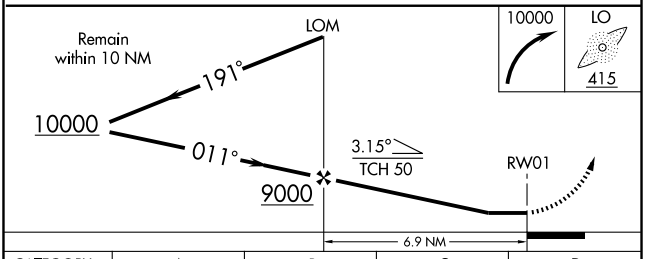
MALSR

MISSED APPROACH: Climbing right turn to 10000 direct LO LOM and hold.

SALT LAKE CENTER	UNICOM
132.4 338.3	123.0 (CTAF)







CATEGORY	A	B	C	D
S-1	8000-¾ 1356 (1400-¾)	8000-1 1356 (1400-1)	8000-2½ 1356 (1400-2½)	8000-2¾ 1356 (1400-2¾)
CIRCLING	8000-1¼ 1356 (1400-1¼)	8000-1½ 1356 (1400-1½)	8000-3 1356 (1400-3)	

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

NDB OLF 404	APP CRS 286°	Rwy Idg 5089 TDZE 1986 Apt Elev 1986

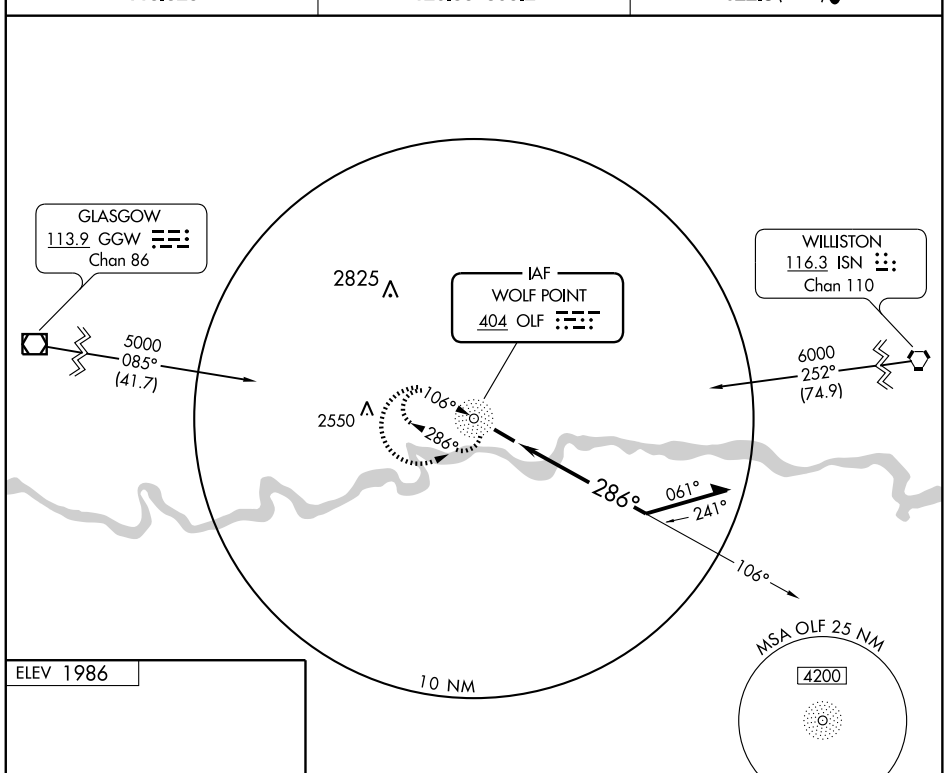
NDB RWY 29

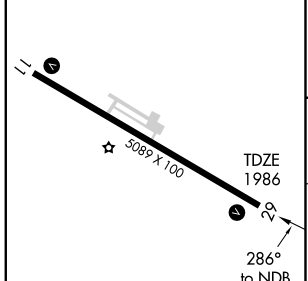
WOLF POINT/L. M. CLAYTON (OLF)

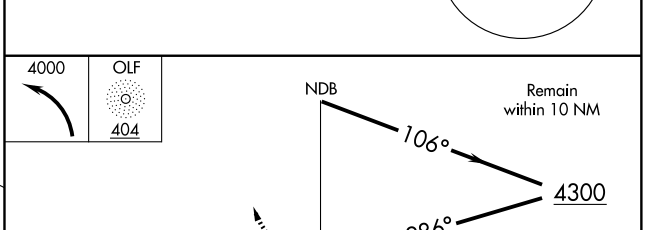
NA If local altimeter setting not received, used Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 160 feet.

MISSED APPROACH: Climbing left turn to 4000 direct OLF NDB continue climb-in-hold to 4000.

ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L







MIRL Rwy 11-29 L
REIL Rwy 11-29 L

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-29	2820-1 834 (900-1)	2820-1¼ 834 (900-1¼)	2820-2½ 834 (900-2½)	2820-2¾ 834 (900-2¾)
CIRCLING	2820-1 834 (900-1)	2820-1¼ 834 (900-1¼)	2820-2½ 834 (900-2½)	2820-2¾ 834 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5089
109°	TDZE	1986
	Apt Elev	1986

RNAV (GPS) RWY 11

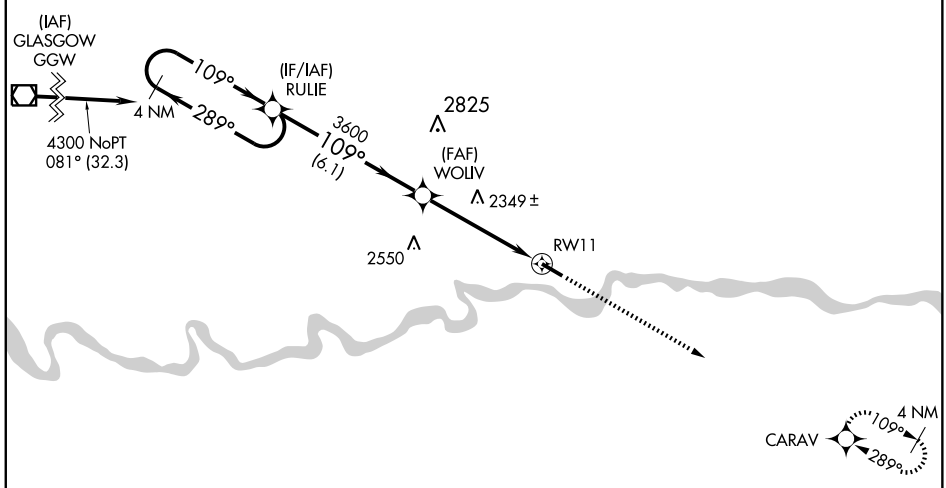
WOLF POINT/L. M. CLAYTON (OLF)

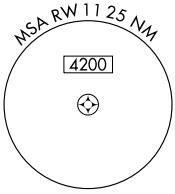
⚠ DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 140 feet.
VDP NA when using Wokal Field/Glasgow Intl altimeter setting.
Straight-in minimums NA at night.

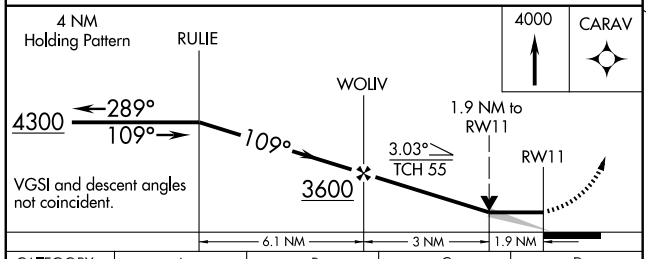
MISSED APPROACH: Climb to 4000 direct CARAV and hold.

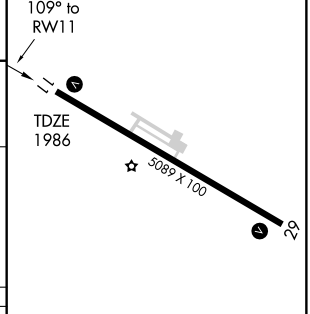
ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L

Procedure NA for arrival at GGW VOR/DME via V430 westbound.









CATEGORY	A	B	C	D
LNAV MDA	2600-1	614 (700-1)	2600-1¾ 614 (700-1¾)	2600-2 614 (700-2)
CIRCLING	2600-1	614 (700-1)	2600-1¾ 614 (700-1¾)	2600-2 614 (700-2)

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5089
289°	TDZE	1986
	Apt Elev	1986

RNAV (GPS) RWY 29

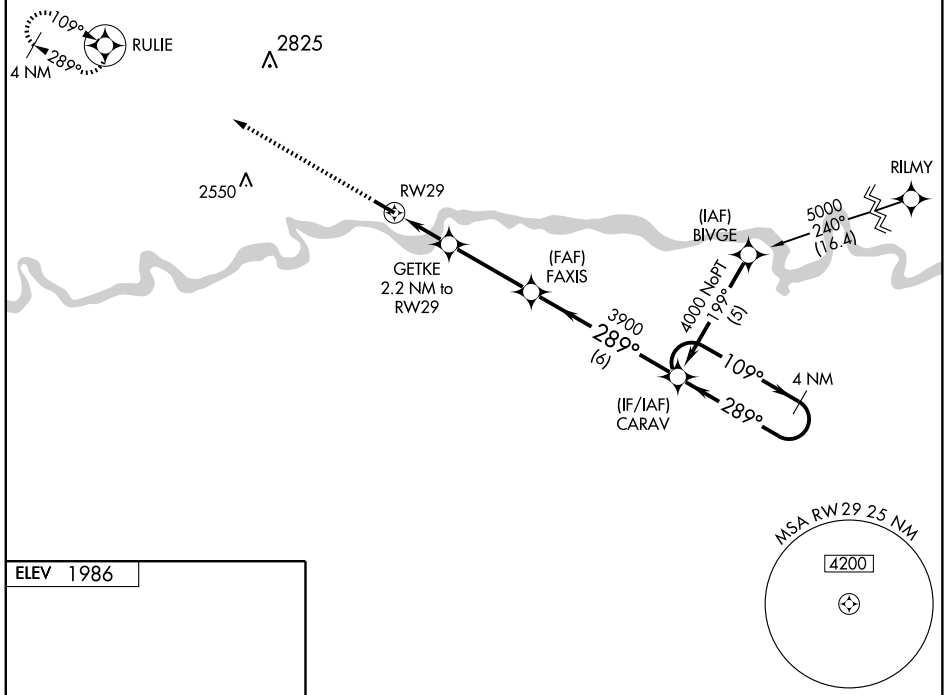
WOLF POINT/L. M. CLAYTON (OLF)

⚠ DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Wokal Field/Glasgow Intl altimeter setting and increase all MDAs 160 feet.
VDP NA when using Wokal Field/Glasgow Intl altimeter setting.

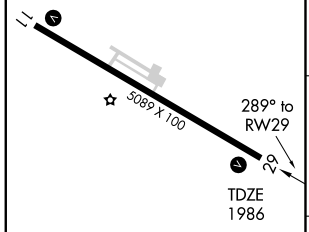
MISSED APPROACH: Climb to 4300 direct RULIE and hold.

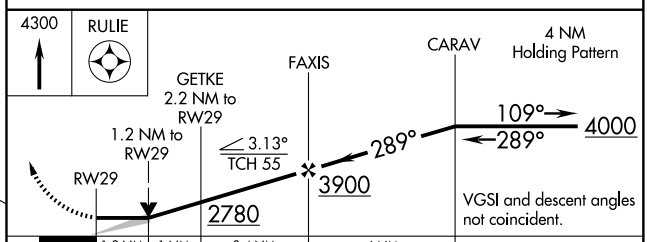
ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L

Procedure NA for arrival at RILMY via V430 eastbound.



ELEV 1986





CATEGORY	A	B	C	D
LNAV MDA	2380-1 394 (400-1)			2380-1¼ 394 (400-1¼)
CIRCLING	2540-1 554 (600-1)		2540-1½ 554 (600-1½)	2580-2 594 (600-2)

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME — ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L[1]**
RNAV (GPS) Y Rwy 10R[2]
RNAV (GPS) Y Rwy 28L[2]
VOR/DME or TACAN Rwy 10L[1]
VOR/DME or TACAN Rwy 28L[1]
[1]Category E, 900-3.
[2]Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31**[1]
VOR/DME Rwy 31[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B

NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10**[1]
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28

NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**

Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15**[1]
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3

[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**

ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27**[1]
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22**[1]
VOR or GPS-A[2]

[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1

NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**

Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**

NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B

NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**

Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**

Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25**[1]
RNAV (GPS) Rwy 29
VOR-B[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA
EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR
MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA
SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT
FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY
GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT
WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT
DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID
GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)
FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT
GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY
SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID
FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT
HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27**[12]
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24**[1]
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20**[1]
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1**[1]
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2**[1]
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26**[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B**[1]
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14**[12]
LOC/DME BC-B[23]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11**[1]
RNAV (GPS) Y Rwy 11[23]
RNAV (RNP) Z Rwy 11[2]**,**800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R**[1]
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4**[1]
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17**[12]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[23]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R**[12]
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25**[1]
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7

NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]

NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL..... **ILS or LOC Rwy 21**[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]

[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L**[1]
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]

[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12**[1]
RNAV (GPS) Rwy 12[2]

[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **NDB or GPS-A**[1]
VOR or GPS Rwy 22,1000-3[2]

[1]Category D, 1000-3.
[2]NA when Rawlins FSS closed.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22**[1]
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16**[1]
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19**[1]
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

ROCK SPRINGS, WY

ROCK SPRINGS SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31**[12]
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R**[1]
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1**[1]
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R**[1]
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[3]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A,B, 1000-2; Categories C,D, 1000-3

SPOKANE INTL ..... **ILS or LOC Rwy 3**[1]
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

NAME ALTERNATE MINIMUMS

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17**[1]
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL ..... **ILS or LOC Rwy 25**[1]
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20**[1]
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/ MCALLISTER FIELD ..... **ILS Y Rwy 27**[12]
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 16,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 34,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME — TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 16, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 16,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 34,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.
NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE,ID

BOISE AIR TERMINAL (GOWEN FIELD)

DEPARTURE PROCEDURE: **Rwys 28L,28R,** turn left **Rwys 10L,10R**, turn right. Climb on BOI R-214 within 20 NM to cross BOI VORTAC at or above MEA/MCA for direction of flight.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.
DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.
DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...
...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.
NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.
DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI

TAKE-OFF MINIMUMS: **All runways,** cross departure end of runway at or above 35' AGL.
DEPARTURE PROCEDURE: **All runways,** climb direct BURLEY (BYI) VOR/DME. Continue climb on R-305 within 10 miles to cross BYI VOR/DME: R-024 CW R-054 at or above 5500; R-055 CW R-240 at or above 8000; R-241 CW R-023 at or above 5900.
NOTE: **Rwy 2,** bridge 252' from departure end of runway, 513' left of centerline, 110' AGL/4195' MSL. Stack 2205' from departure end of runway, 857' right of centerline, 79' AGL/4236' MSL. Elevator 4092' from departure end of runway, 297' right of centerline, 133' AGL/4283' MSL. **Rwy 20,** antenna 523' from departure end of runway, 338' right of centerline, 43' AGL/4217' MSL. **Rwy 24**, tree 630' from departure end of runway, 521' right of centerline, 41' AGL/4215' MSL. Grain elevator 3106' from departure end of runway, 163' left of centerline, 137' AGL/4317' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.
DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading. **All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.
NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .**Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/ 6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 1500-2 or std. with a min. climb of 250' per NM to 6800. **Rwy 22**, 1600-2 or std. with a min. climb of 340' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 4, 22**, turn left. **All aircraft** climb direct COD VOR/DME. Climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above: COD R-350 CW R-170, 6000; or R-171 CW R-349, 11800.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FLD

TAKE-OFF MINIMUMS: **Rwy 5**, CAT A,B, 1700-2 or std. with a min. climb of 230' per NM to 4000. CAT C,D, 2600-2 or std. with a min. climb of 320' per NM to 5400.

DEPARTURE PROCEDURE: **Rwys 1,5**, turn left, climb via COE R-005 to 5400, reverse course, continue climb direct COE VOR. **Rwy 19**, turn right. **Rwy 23,** turn left, climb via COE R-232 to 5000, reverse course, continue climb direct COE VOR.

COLSTRIP, MT

COLSTRIP (M46)

AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 360' per NM to 5600.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading; **Rwy 22,** climbing left turn to heading 130°; **Rwys 4,34,** climbing right turn to heading 210°; **All aircraft** intercept and continue climb via the 170° bearing from DPY NDB to intercept GEG R-006 to GEG VORTAC.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn...**Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)
AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)
ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID

IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.

DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)

FORT LEWIS, WA

. . . . . Rwy 15, 300-1*
Rwy 33, 300-1**

* Or standard with minimum climb of 430/NM to 500.
** Or standard with minimum climb of 380/NM to 600.
Rwy 15 climb runway heading to 700 then climbing left turn direct GR LOM. Rwy 33 climb runway heading direct GR LOM. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GR LOM climb on course. All others continue climb in GR holding pattern (Hold NW, RT, 147° inbound) to cross GR LOM at or above: 071° CW 134° bearing from GR LOM, 8500; 261° CW 329° bearing from GR LOM, 1500.

GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.

NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.

NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT

HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...

...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.

NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,**1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**,1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL**. Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76'AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44'AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58'AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/ 3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30**, 1200-2 or std. with a min. climb of 320' per NM to 1300.

DEPARTURE PROCEDURE: Departure procedure limited to CAT A,B aircraft. **Rwy 30**, climb straight ahead to 1500 then climbing right turn direct LSO NDB. Continue climb in holding pattern (N, right turns, 171° inbound) to cross LSO NDB at or above 3000 direct BTG VORTAC or MEA for route of flight.

KEMMERER, WY

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR

LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY

LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT

LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID

LEWISTON-NEZ PERCE COUNTY

DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT

LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.

DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR

LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT

LIBBY

TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT

MISSION FIELD (LVM)

AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.

DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR

MADRAS MUNI (S33)

ORIG-A 09043 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)

TACOMA, WA 09127

DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787'from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735'from DER, 314' right of centerline 30'AGL/4202' MSL. Road 207'from DER, 254'right of centerline, 15' AGL/4187'MSL.

NEWPORT,OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO,OR

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...
Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...
Rwy 25, climb direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ... **Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L,28R,** climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/88' MSL. **Rwy 28R,** multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)

AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091°CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)

AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)

AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ... ...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100'AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL

DEPARTURE PROCEDURE: Aircraft departing RIW R-280 CW R-170 climb on course. All others climb to 6600, then continue climb direct RIW VOR/DME to cross RIW VOR/DME at or above 7500 before proceeding on course.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY

DEPARTURE PROCEDURE: Climb direct OCS VORTAC. Aircraft departing OCS R-205 CW R-170 climb on course. All others climb in the OCS holding pattern (E, right turns, 260°inbound) to cross OCS VORTAC at or above 7300.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149'left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . . . . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . . . . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD

TAKE-OFF MINIMUMS: **Rwys 3L,3R,** std. w/ min. climb of 400' per NM to 3600, or 1600-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 360' per NM to 3100, or 1600-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3100, or 1600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course. **Rwys 21L, 21R,** climb to 2800, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course.

NOTE: **Rwy 3L,** multiple trees beginning 5000' from departure end of runway, 530' left of centerline, up to 104' AGL/2513' MSL. Tree 1854' from departure end of runway, 773' right of centerline, 54' AGL/2030' MSL, tree 2365' from departure end of runway, 798' right of centerline, 61' AGL/2037' MSL. **Rwy 3R,** multiple trees beginning 5016' from departure end of runway, 1033' left of centerline, up to 104' AGL/2529' MSL, pole 2.5 NM from departure end of runway, 2059' left of centerline, 62' AGL/2454' MSL, hangar 92' from departure end of runway, 341' right of centerline, 5' AGL/1967' MSL, NDB 925' from departure end of runway, 270' right of centerline, 25' AGL/1987' MSL, multiple trees beginning 1870' from departure end of runway, 271' right of centerline, up to 128' AGL/3560' MSL. **Rwy 21L,** pole 316' from departure end of runway, 302' left of centerline, 33' AGL/1992' MSL, tree 926' from departure end of runway, 362' left of centerline, 50' AGL/2006' MSL, building 1057' from departure end of runway, 158' left of centerline, 19' AGL/1975' MSL, building 1061' from departure end of runway, 110' left of centerline, 19' AGL/1975' MSL. Elevator 4080' from departure end of runway, 598' left of centerline, 134' AGL/2080' MSL. **Rwy 21R,** hangar 204' from departure end of runway, 496' left of centerline, 13' AGL/1969' MSL, pole 659' from departure end of runway, 404' left of centerline, 26' AGL/1979' MSL, building, 946' from departure end of runway, 230' left of centerline, 24' AGL/1973' MSL, pole 1399' from departure end of runway, 2' left of centerline, 33' AGL/1982' MSL, elevator 2655' from departure end of runway, 1097' left of centerline, 134' AGL/2080' MSL, tree 189' from departure end of runway, 511' right of centerline, 46' AGL/1979' MSL, tree 480' from departure end of runway, 404' right of centerline, 43' AGL/1979' MSL, pole 1252' from departure end of runway, 55' right of centerline, 29' AGL/1975' MSL, pole 1427' from departure end of runway, 13' right of centerline, 33' AGL/1982' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A,B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C,D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .**Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course ...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E,right turns,253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

VOR/DME CVO 115.4 Chan 101	APP CRS 032°	Rwy Idg N/A TDZE N/A Apt Elev 223

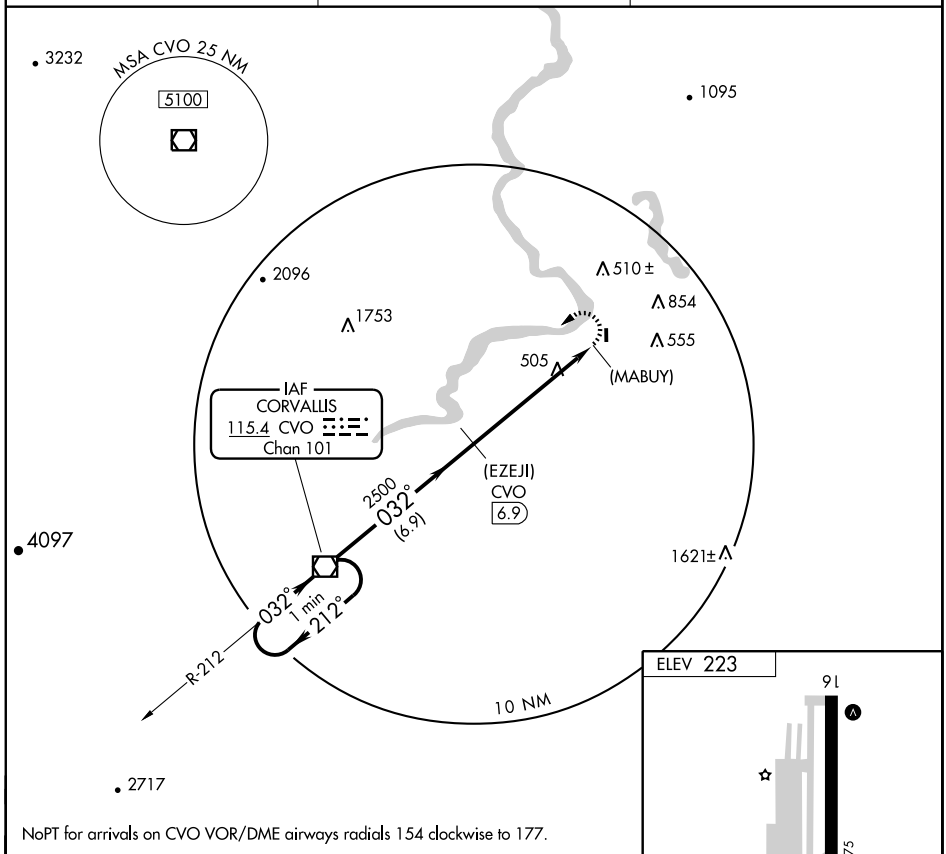
VOR/DME or GPS-A

ALBANY MUNI (S12)

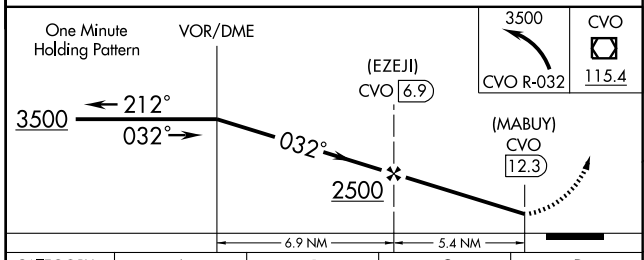
Use Corvallis altimeter setting.

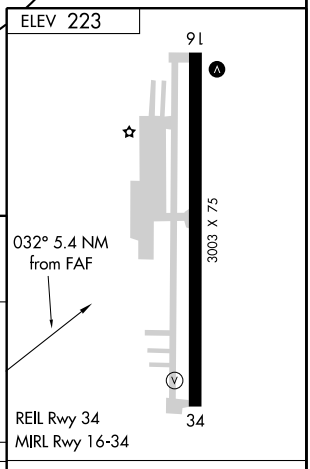
MISSED APPROACH: Climbing left turn to 3500 via CVO R-032 to CVO VOR/DME and hold.

CORVALLIS AWOS-3	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	122.8 (CTAF) L



NoPT for arrivals on CVO VOR/DME airways radials 154 clockwise to 177.





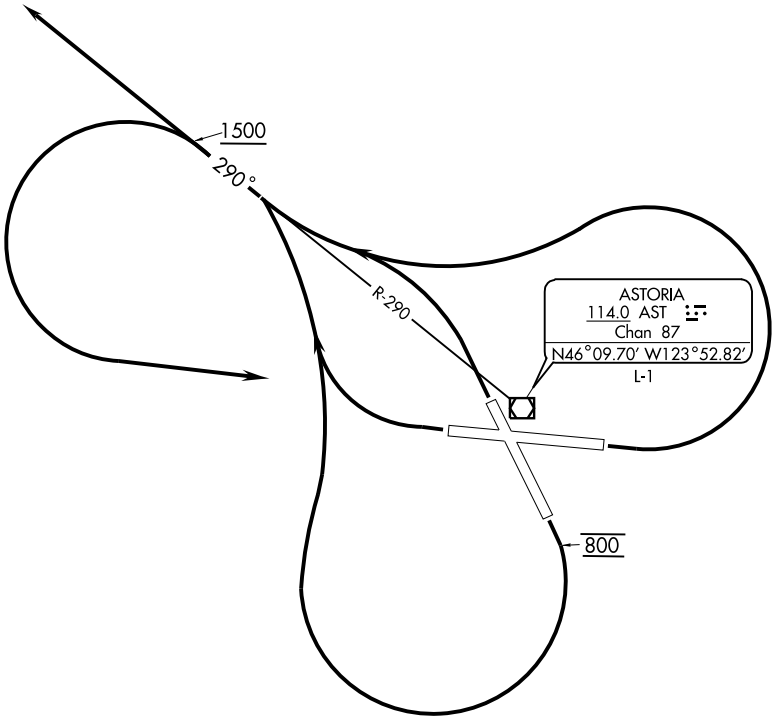
CATEGORY	A	B	C	D
CIRCLING	840-1 617 (700-1)		NA	

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

ASTORIA ONE DEPARTURE (OBSTACLE) SL-24 (FAA)

SEATTLE CENTER
124.2 317.6
McMINNVILLE RADIO
122.3



NOTE: TAKE-OFF MINIMUMS: Rwy 8, 800-3 or standard with minimum climb of 320' per NM to 900'. Rwy 13, 700-2 or standard with minimum climb of 350' per NM to 800'. Rwys 26,31, Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8,31: Turn left. Thence....
TAKE-OFF RUNWAY 26: Turn right. Thence....
TAKE-OFF RUNWAY 13: Climb runway heading to 800 then climbing right turn. Thence....

.... Aircraft departing northwest bound climb via AST R-290 on course. All other aircraft climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

LOC I-AST	APP CRS	Rwy Idg	N/A
109.5	257°	TDZE	9
		Apt Elev	11

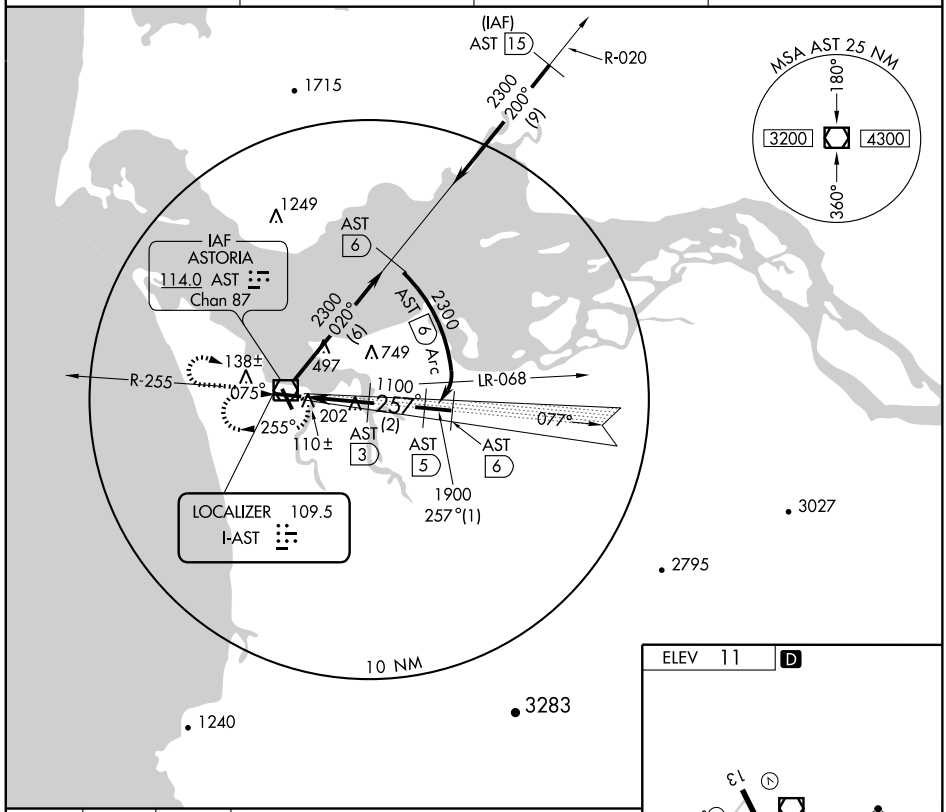
COPTER LOC/DME 257°

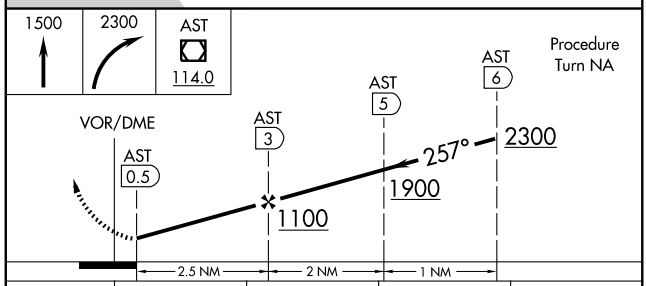
ASTORIA RGNL (AST)

T NA — DME from AST VOR/DME. Simultaneous reception of I-AST and AST VOR/DME required.
Increase visibility to ½ mile for inoperative MALSR.

MISSED APPROACH: Climb to 1500 then climbing right turn to 2300 direct AST VOR/DME and hold.

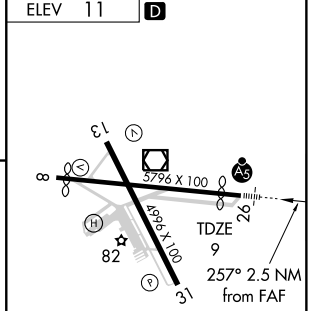
ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L





CATEGORY	COPTER	B	C	D
H-257°	380- ¼ 371 (400- ¼)	NA		

CIRCLING NOT AUTHORIZED



REIL Rwy 8 L
REIL Rwy 13
MIRL Rwys 8-26 and 13-31 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME AST	APP CRS	Rwy Idg	N/A
114.0	066°	TDZE	N/A
Chan 87		Apt Elev	11

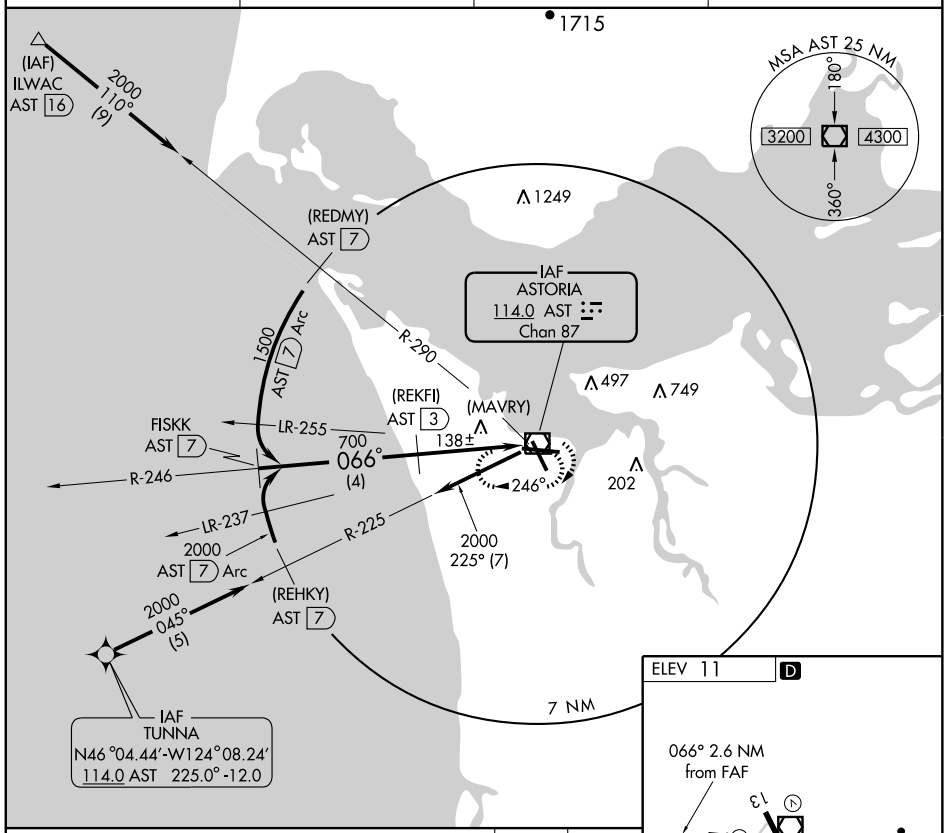
COPTER VOR/DME or GPS 066°

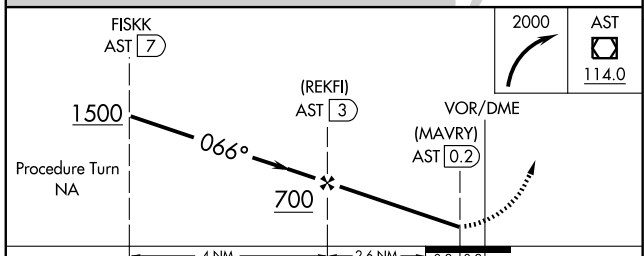
ASTORIA RGNL (AST)

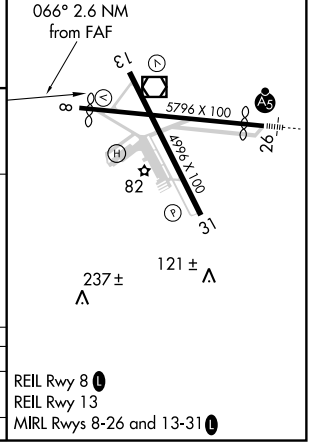
T
NA

MISSED APPROACH: Climbing right turn to 2000 in AST VOR/DME holding pattern.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L







CATEGORY	COPTER	B	C	D
H-066°	500-½ 489 (500-½)	NA		

CIRCLING NOT AUTHORIZED

REIL Rwy 8 L
REIL Rwy 13
MIRL Rwys 8-26 and 13-31 L

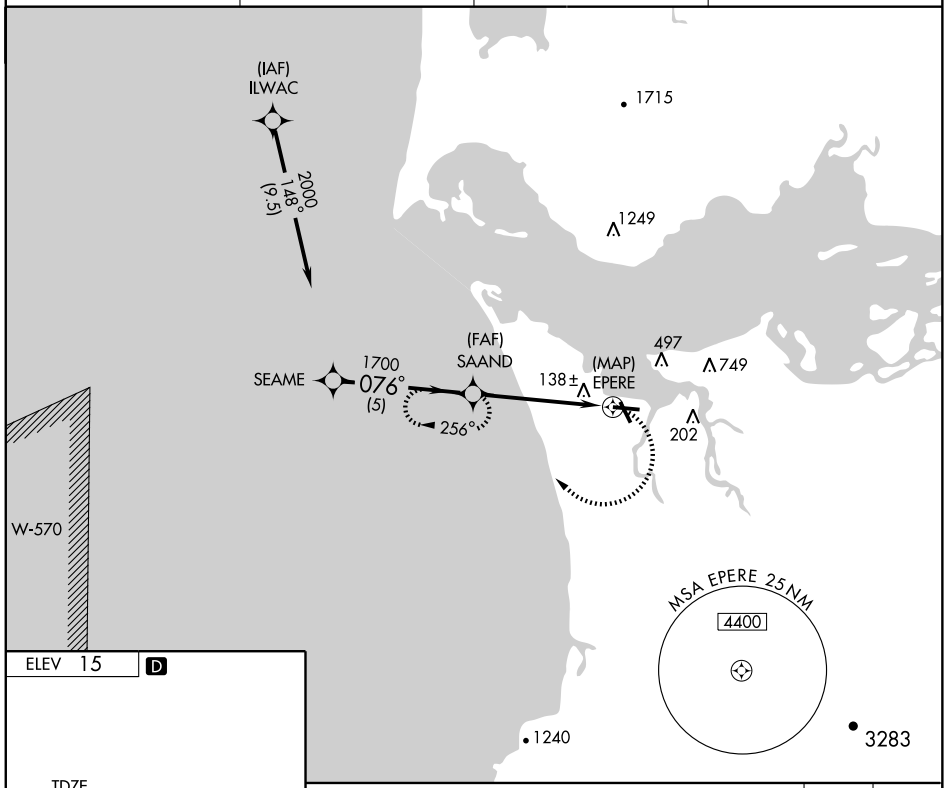
APP CRS	Rwy Idg	4896
076°	TDZE	14
	Apt Elev	15

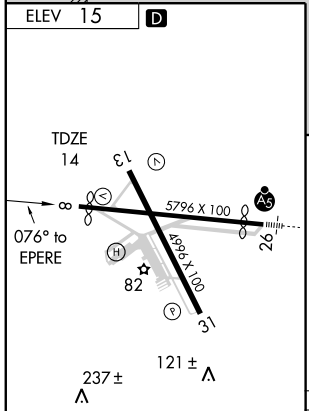
GPS RWY 8
ASTORIA RGNL (AST)

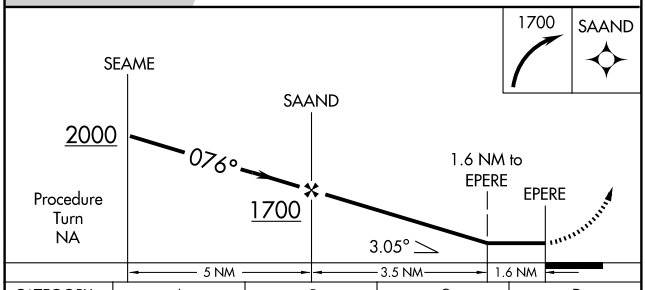
T
NA

MISSED APPROACH: Climbing right turn to 1700 direct SAAND WP and hold.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-8	600-1 586 (600-1)		600-1½ 586(600-1½)	600-1¾ 586(600-1¾)
CIRCLING	660-1 645(700-1)	760-1¼ 745(800-1¼)	800-2¼ 785(800-2¼)	900-3 885(900-3)

REIL Rwy 8 L
REIL Rwy 13
MIRL Rwys 8-26 and 13-31 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-AST	APP CRS	Rwy Idg	4782
109.5	257°	TDZE	9
		Apt Elev	11

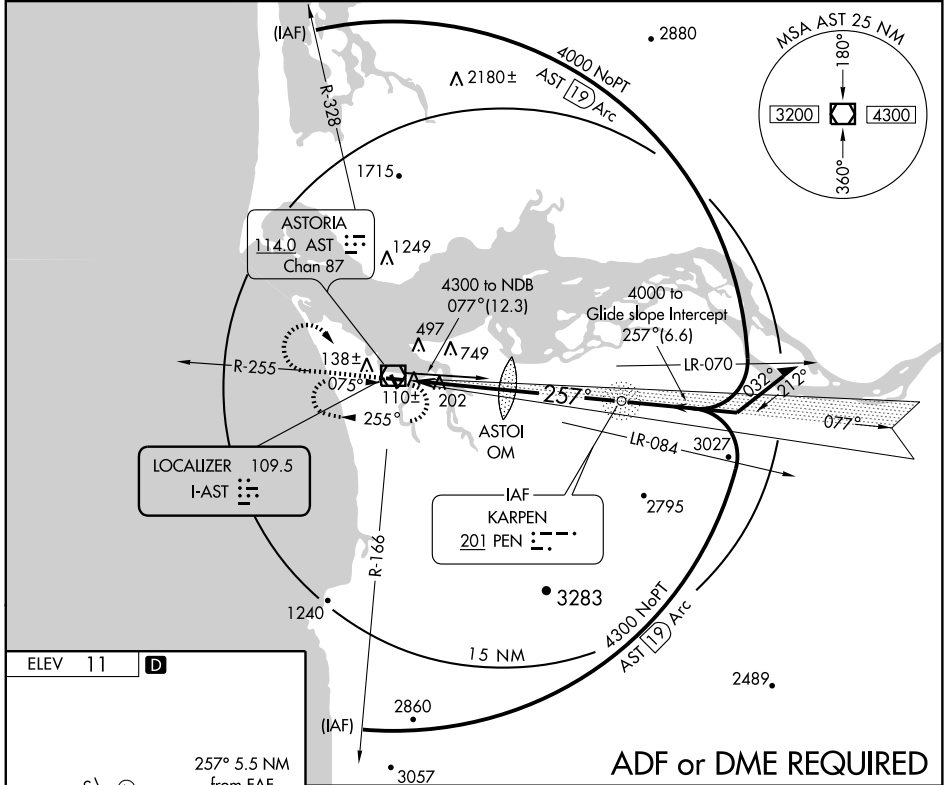
ILS RWY 26
ASTORIA RGNL (AST)

T NA — Circling requires descent on GS to MDA.

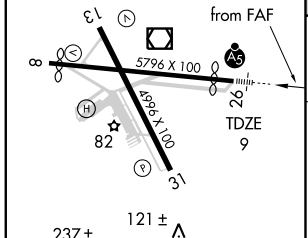
MALSR

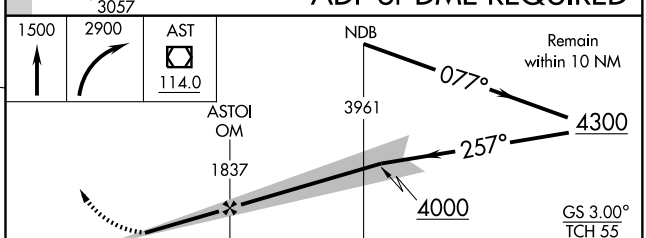
MISSED APPROACH: Climb to 1500 then climbing right turn to 2900 direct AST VOR/DME and hold.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L



ADF or DME REQUIRED





FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

CATEGORY	A	B	C	D
S-ILS 26	292-¾ 283 (300-¾)			
S-LOC 26	Approach not authorized when glide slope not utilized.			
CIRCLING ILS	700-1 689 (700-1)	760-1¼ 749 (800-1¼)	800-2¼ 789 (800-2¼)	880-2¾ 869 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	4782
CH 97711	257°	TDZE	14
W26A		Apt Elev	15

RNAV (GPS) RWY 26
ASTORIA RGNL (AST)

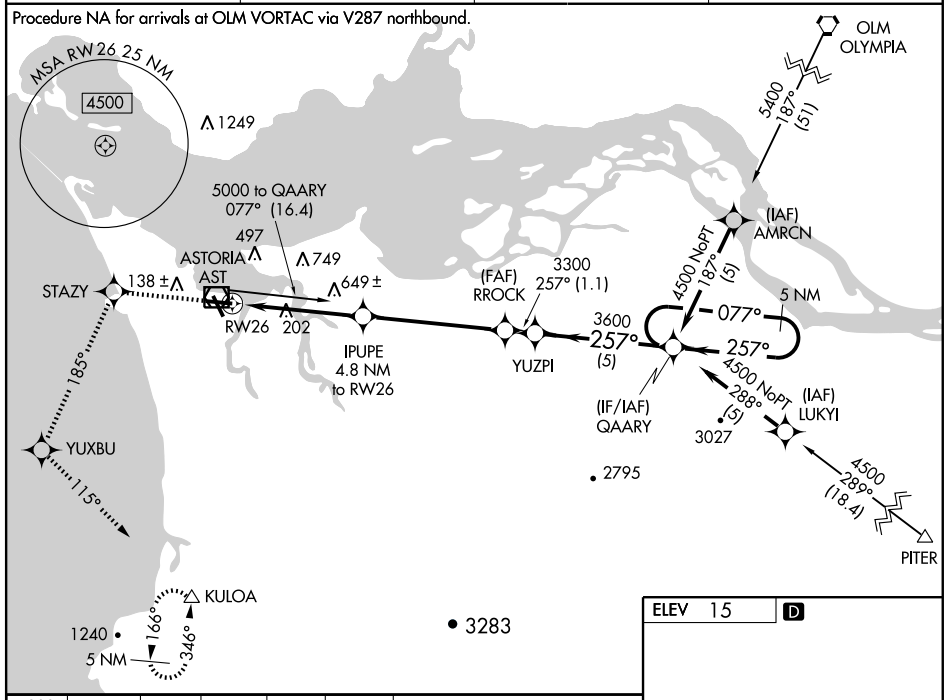
Inoperative table does not apply. DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Kelso altimeter setting and increase all DA 95 feet and all MDA 100 feet; increase LPV all Cats, LNAV Cats C and D and circling Cats C and D visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 5000 direct STAZY and via track 185° to YUXBU and via track 115° to KULOA and hold.

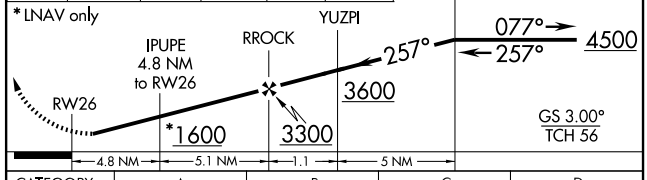
ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L

Procedure NA for arrivals at OLM VORTAC via V287 northbound.



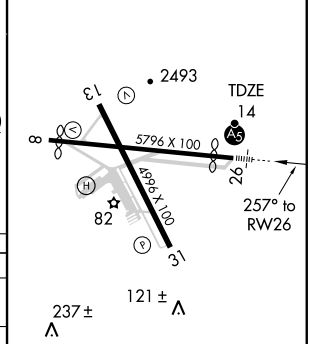
5000	STAZY	185° trk	YUXBU	115° trk	KULOA

5 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	300-1	286 (300-1)		
LNAV MDA	900-1¼	886 (900-1¼)	900-2¾ 886 (900-2¾)	900-3 886 (900-3)
CIRCLING	900-1¼	885 (900-1¼)	900-2¾ 885 (900-2¾)	900-3 885 (900-3)

ELEV 15 D



REIL Rwy 8 L
REIL Rwy 13
MIRL Rwys 8-26 and 13-31 L

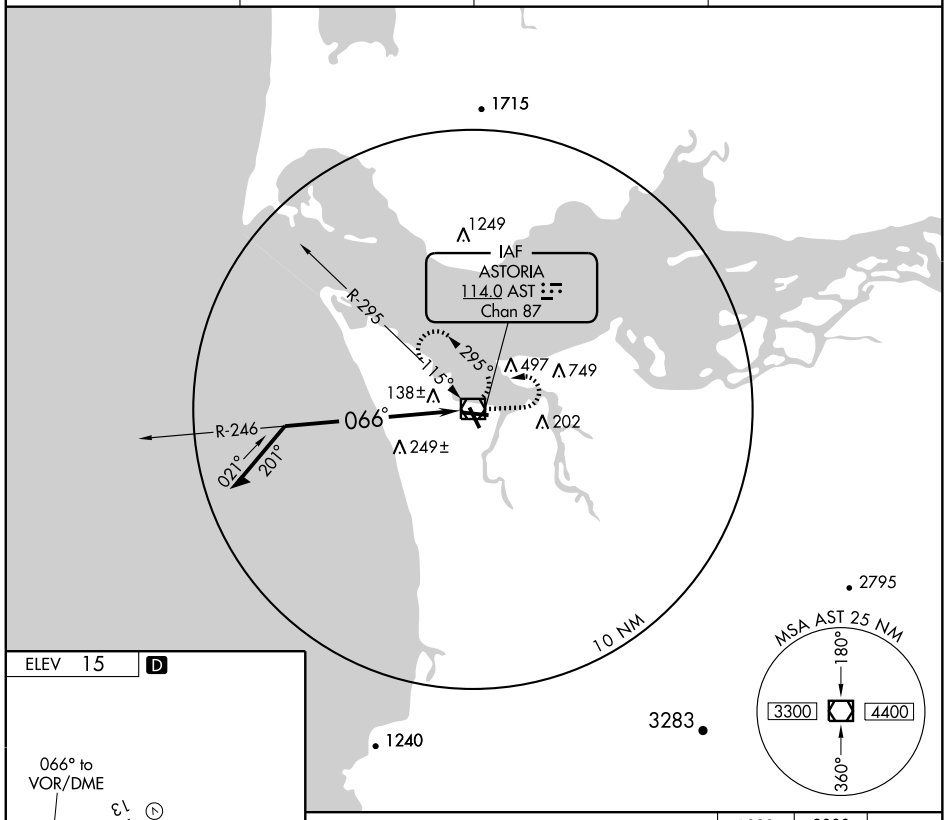
NW-1, 14 JAN 2010 to 11 FEB 2010

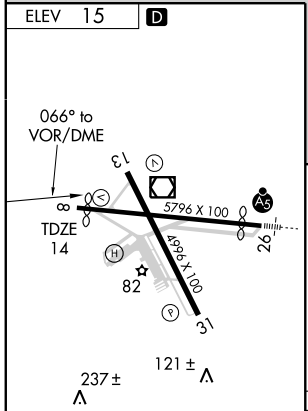
VOR/DME AST	APP CRS	Rwy Idg	4896
114.0	066°	TDZE	14
Chan 87		Apt Elev	15

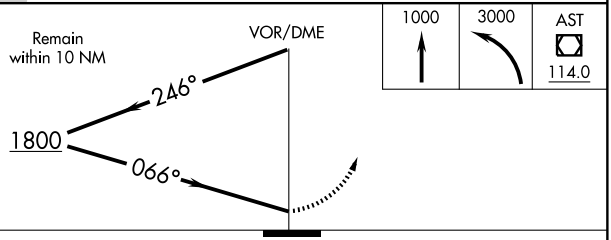
VOR RWY 8
ASTORIA RGNL (AST)

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 AST VOR/DME holding pattern.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-8	660-1 646 (700-1)		660-1¾ 646 (700-1¾)	660-2 646 (700-2)
CIRCLING	660-1 645 (700-1)	760-1¼ 745 (800-1¼)	800-2¼ 785 (800-2¼)	900-3 885 (900-3)

REIL Rwy 8 L
REIL Rwy 13
MIRL Rwys 8-26 and 13-31 L

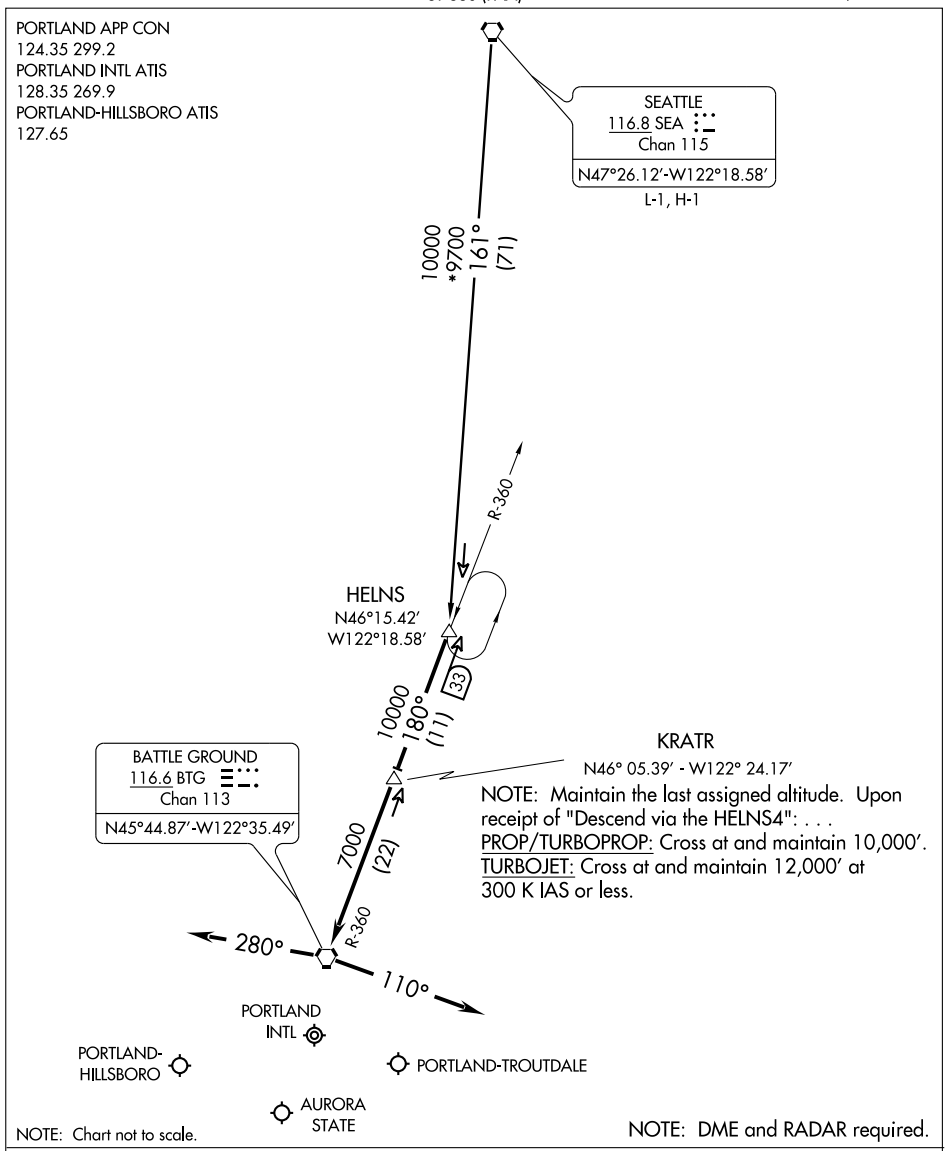
NW-1, 14 JAN 2010 to 11 FEB 2010

(HELNS.HELNS4) 03135

HELNS FOUR ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



SEATTLE TRANSITION (SEA.HELNS4): From over SEA VORTAC via SEA R-161 to HELNS DME FIX. Thence....

.... From over HELNS DME FIX via BTG R-360 to BTG VORTAC. Thence....

LANDING EAST: Depart BTG VORTAC heading 280° for vectors to final approach course.

LANDING WEST: Depart BTG VORTAC heading 110° for vectors to final approach course.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-UAO	APP CRS	Rwy Idg	5004
111.15	169°	TDZE	200
Chan 48 (Y)		Apt Elev	200

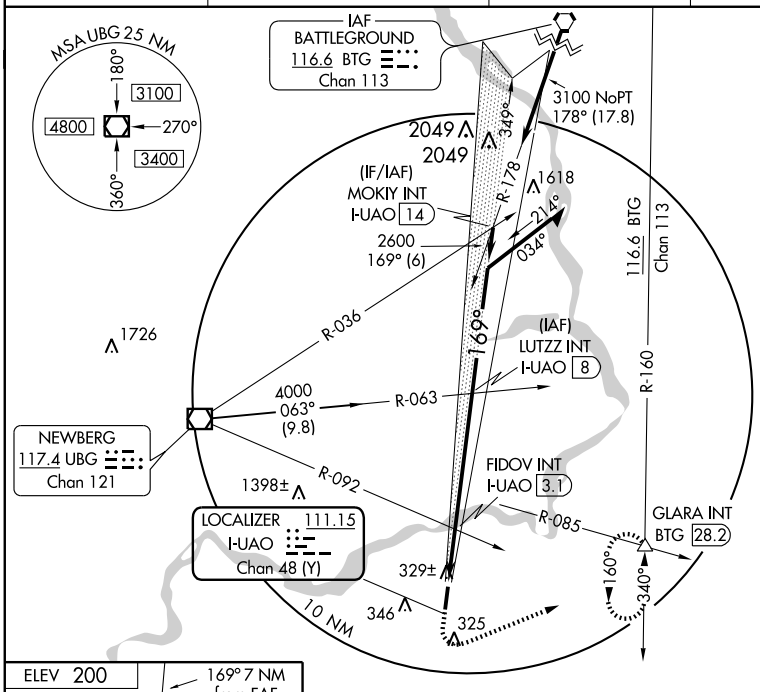
LOC RWY 17
AURORA STATE (UAO)

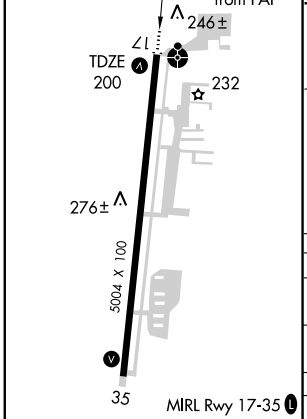
Inoperative table does not apply.

ODALS

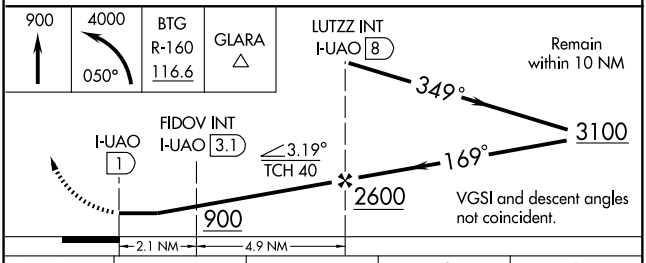
MISSED APPROACH: Climb to 900 then climbing left turn to 4000 via heading 050° and BTG R-160 to GLARA Int/ BTG 28.2 DME and hold. Continue climb-in-hold to 4000.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
118.525	126.0 284.6	119.95	122.7 (CTAF) L





FAF to MAP 7 NM					
Knots	60	90	120	150	180
Min:Sec	6:59	4:40	3:29	2:47	2:19



CATEGORY	A	B	C	D
S-17	900-1 700 (700-1)		900-2 700 (700-2)	900-2¼ 700 (700-2¼)
CIRCLING	900-1 700 (700-1)		900-2 700 (700-2)	900-2¼ 700 (700-2¼)
FIDOV FIX MINIMUMS				
S-17	580-1 380 (400-1)			580-1¼ 380 (400-1¼)
CIRCLING	640-1 440 (500-1)	660-1 460 (500-1)	660-1½ 460 (500-1½)	760-2 560 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

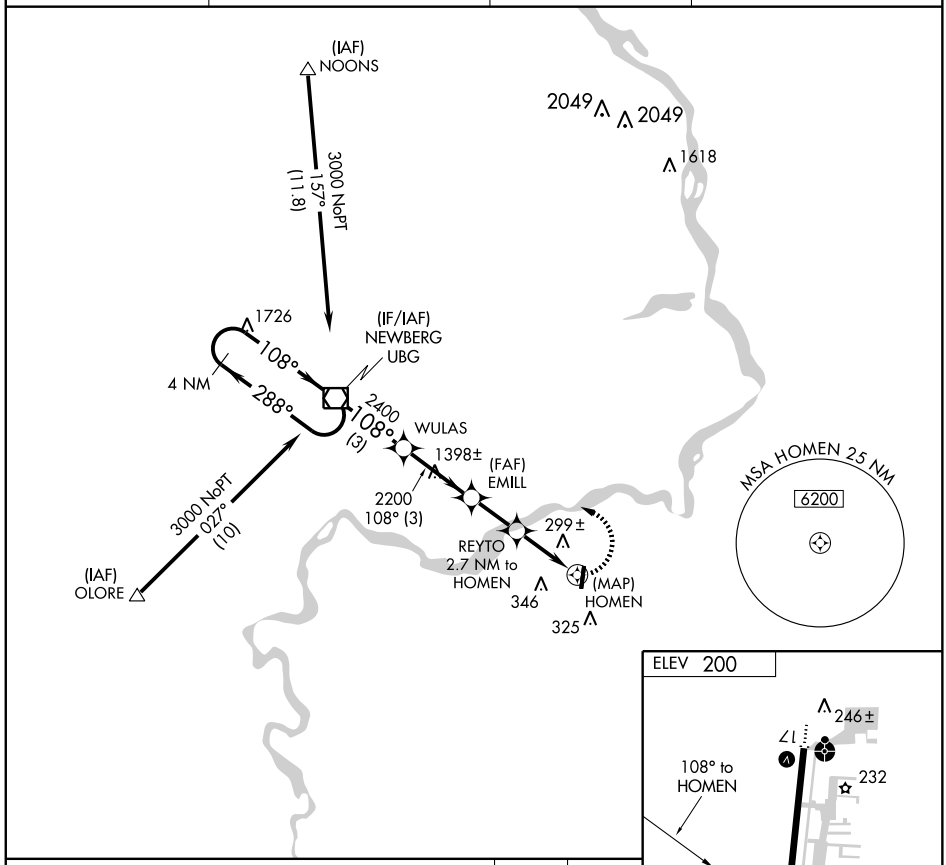
APP CRS	Rwy Idg	N/A
108°	TDZE	N/A
	Apt Elev	200

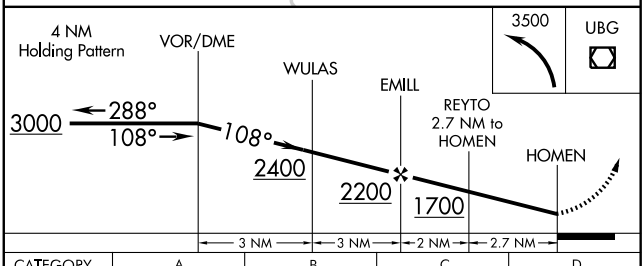
RNAV (GPS)-B
AURORA STATE (UAO)

DME/DME RNP- 0.3 NA.

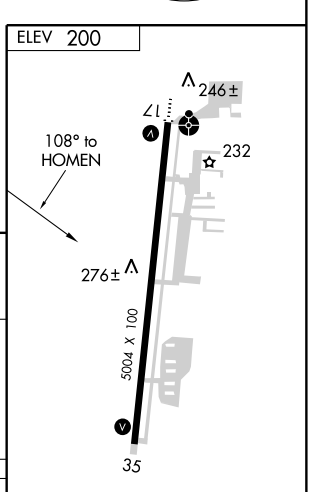
MISSED APPROACH: Climbing left turn to 3500 direct UBG VOR/DME and hold.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
118.525	126.0 284.6	119.95	122.7 (CTAF)





CATEGORY	A	B	C	D
CIRCLING	640-1 440 (500-1)	660-1 460 (500-1)	660-1½ 460 (500-1½)	760-2 560 (600-2)



MIRL Rwy 17-35

WAAS	APP CRS	Rwy Idg	5004
CH 70308	169°	TDZE	200
W17A		Apt Elev	200

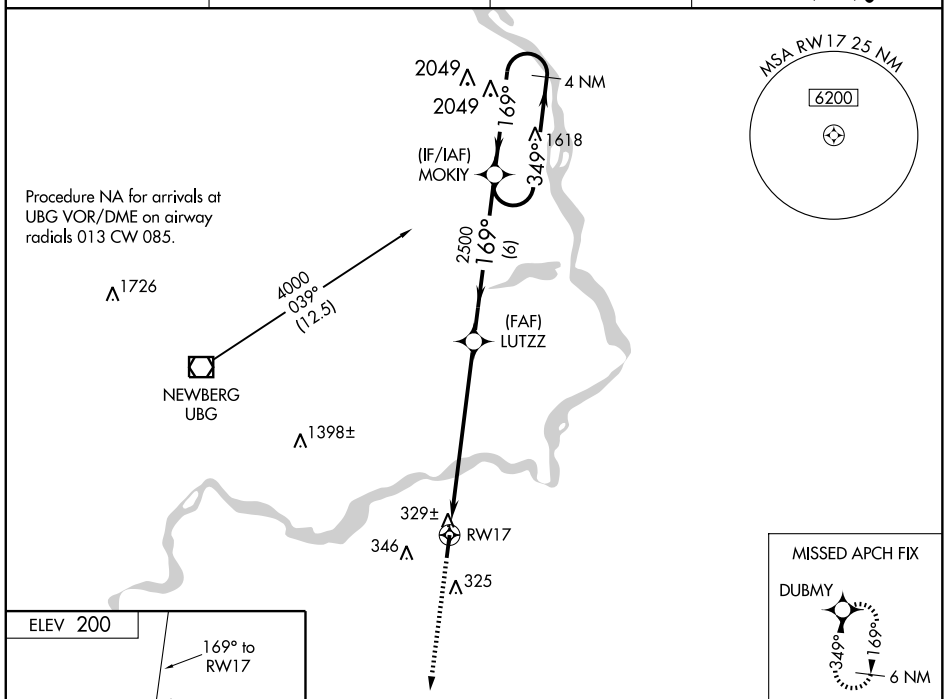
RNAV (GPS) RWY 17
AURORA STATE (UAO)

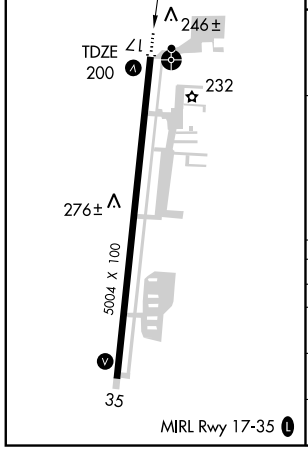
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Mc Minnville Muni altimeter setting and increase all DA 42 feet and all MDA 60 feet; increase LPV, LNAV/VNAV visibilities all Cats. ¼ mile, increase LNAV visibility Cats. A/C/D ¼ mile, increase Circling visibilities Cats. A/C/D ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). Inoperative table does not apply. Visibility reduction by helicopters NA.

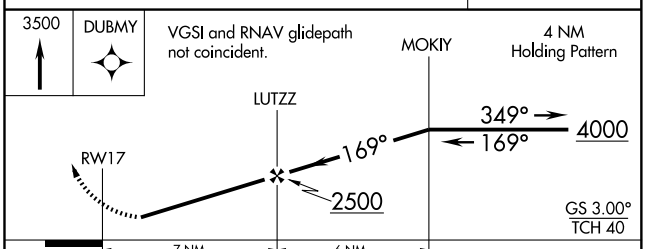
ODALS

MISSED APPROACH: Climb to 3500 direct DUBMY and hold, continue climb-in-hold to 3500.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
118.525	126.0 284.6	119.95	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	550-1¼ 350 (400-1¼)			
LNAV/VNAV DA	580-1¼ 380 (400-1¼)			
LNAV MDA	1060-1 860 (900-1)	1060-1¼ 860 (900-1¼)	1060-2½ 860 (900-2½)	1060-2¾ 860 (900-2¾)
CIRCLING	1060-1 860 (900-1)	1060-1¼ 860 (900-1¼)	1060-2½ 860 (900-2½)	1060-2¾ 860 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

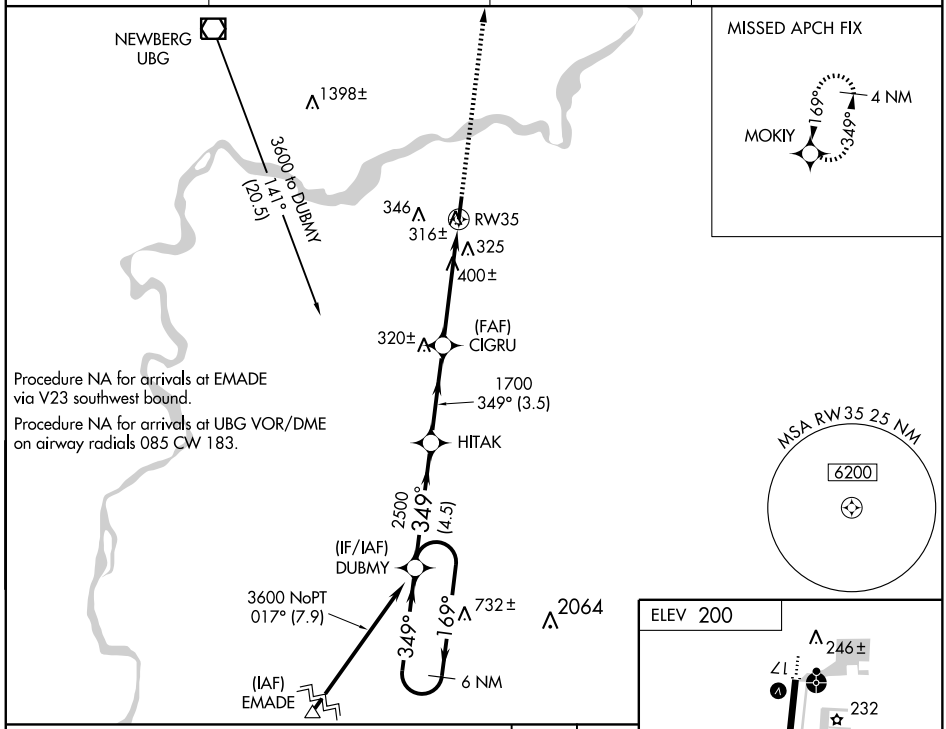
WAAS	APP CRS	Rwy Idg	5004
CH 77508	349°	TDZE	199
W35A		Apt Elev	200

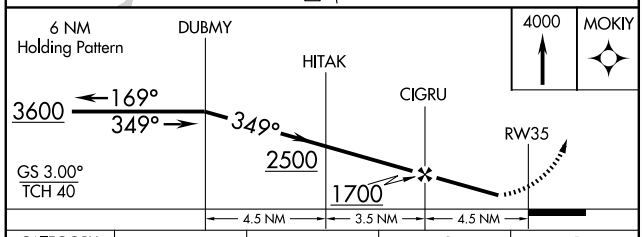
RNAV (GPS) RWY 35
AURORA STATE (UAO)

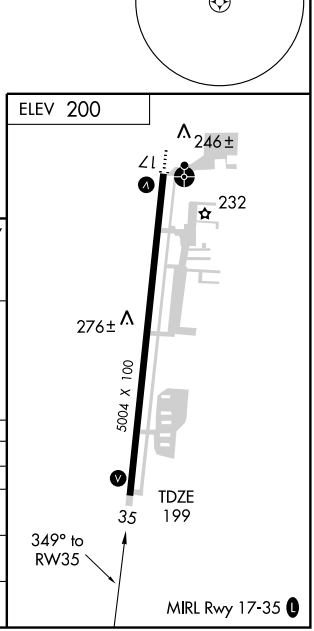
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). When local altimeter setting not received, use Mc Minnville Muni altimeter setting and increase all DA 42 feet and MDA 60 feet; increase LPV, LNAV/VNAV visibilities ¼ mile all Cats, increase LNAV Cat D visibility to 1½. Visibility reduction by helicopters NA. Baro-VNAV NA when using Mc Minnville Muni altimeter setting.

MISSED APPROACH: Climb to 4000 direct MOKIY and hold, continue climb-in-hold to 4000.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
118.525	126.0 284.6	119.95	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	500-1 301 (300-1)			
LNAV/VNAV DA	604-1½ 405 (500-1½)			
LNAV MDA	700-1 501 (500-1)		700-1½ 501 (500-1½)	
CIRCLING	700-1 500 (500-1)		700-1½ 500 (500-1½)	760-2 560 (600-2)

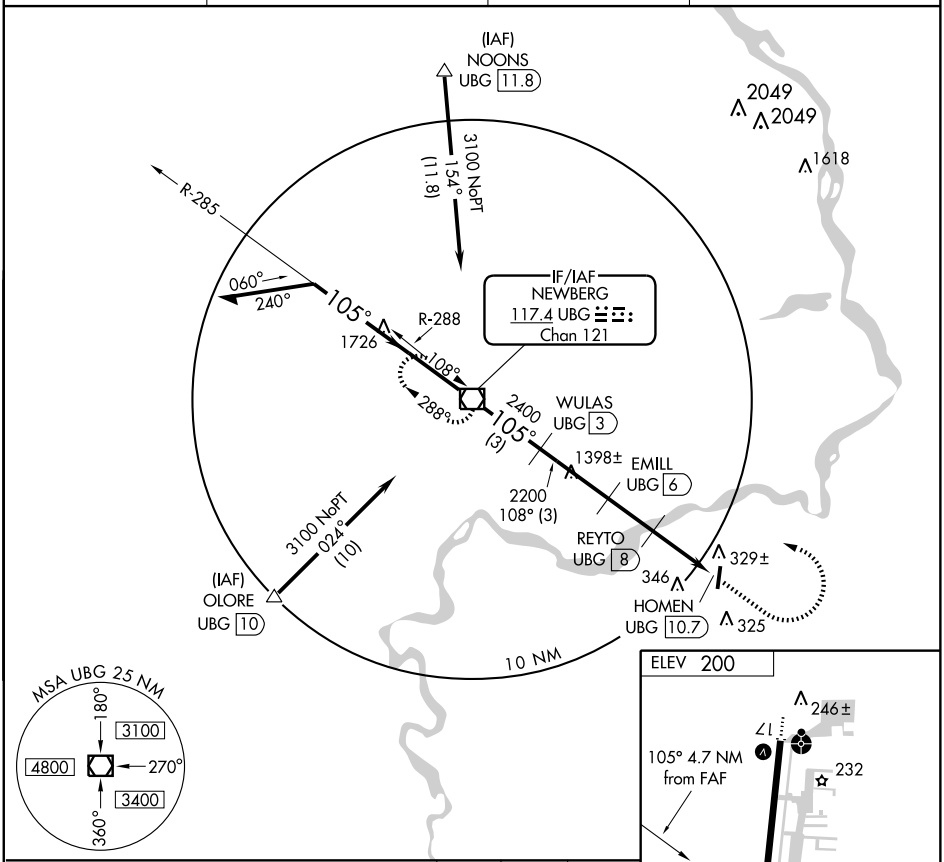
NW-1, 14 JAN 2010 to 11 FEB 2010

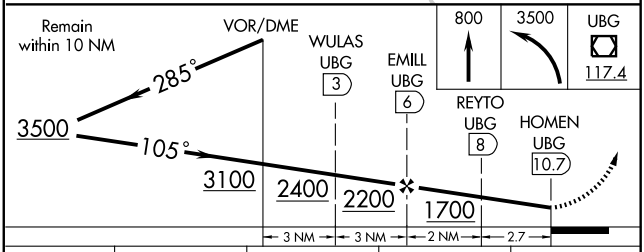
VOR/DME UBG 117.4 Chan 121	APP CRS 105°	Rwy Idg N/A TDZE N/A Apt Elev 200

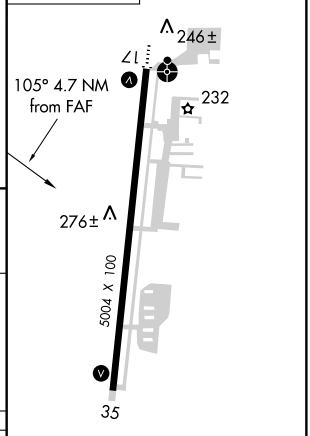
VOR/DME-A
AURORA STATE (UAO)

MISSED APPROACH: Climb to 800 then climbing left turn to 3500 direct UBG VOR/DME and hold.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
118.525	126.0 284.6	119.95	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	640-1 440 (500-1)	660-1 460 (500-1)	660-1½ 460 (500-1½)	760-2 560 (600-2)

MIRL Rwy 17-35 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS		
125°	Rwy Idg	5095
	TDZE	3370
	Apt Elev	3372

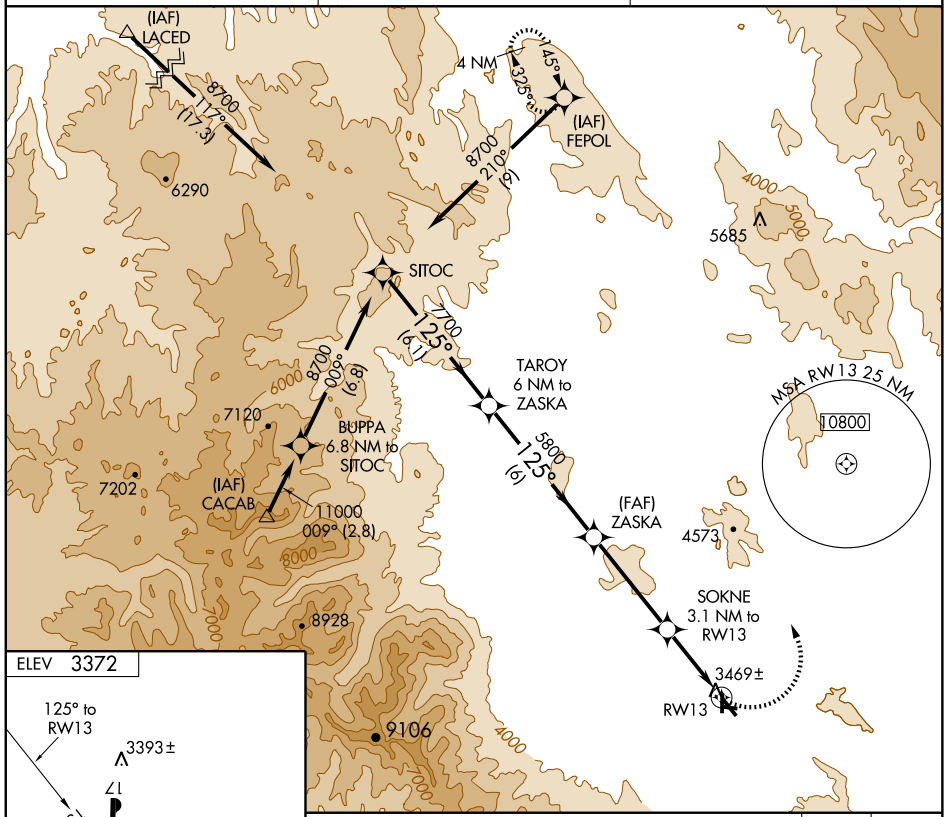
RNAV (GPS) RWY 13

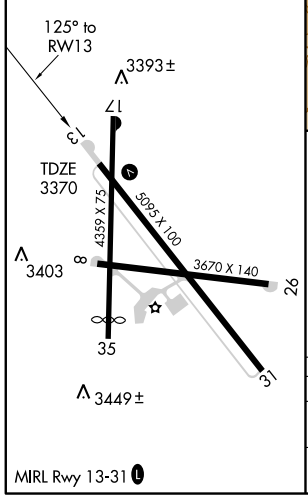
BAKER CITY MUNI (BKE)

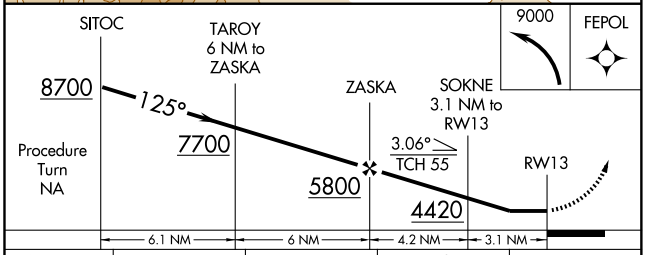
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 9000 direct FEPOL and hold.

ASOS	SALT LAKE CENTER	UNICOM
134.275	128.05 387.15	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4080-1	710 (800-1)	4080-2 710 (800-2)	4080-2¼ 710 (800-2¼)
CIRCLING	4080-1	708 (800-1)	4080-2 708 (800-2)	4220-2¾ 848 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

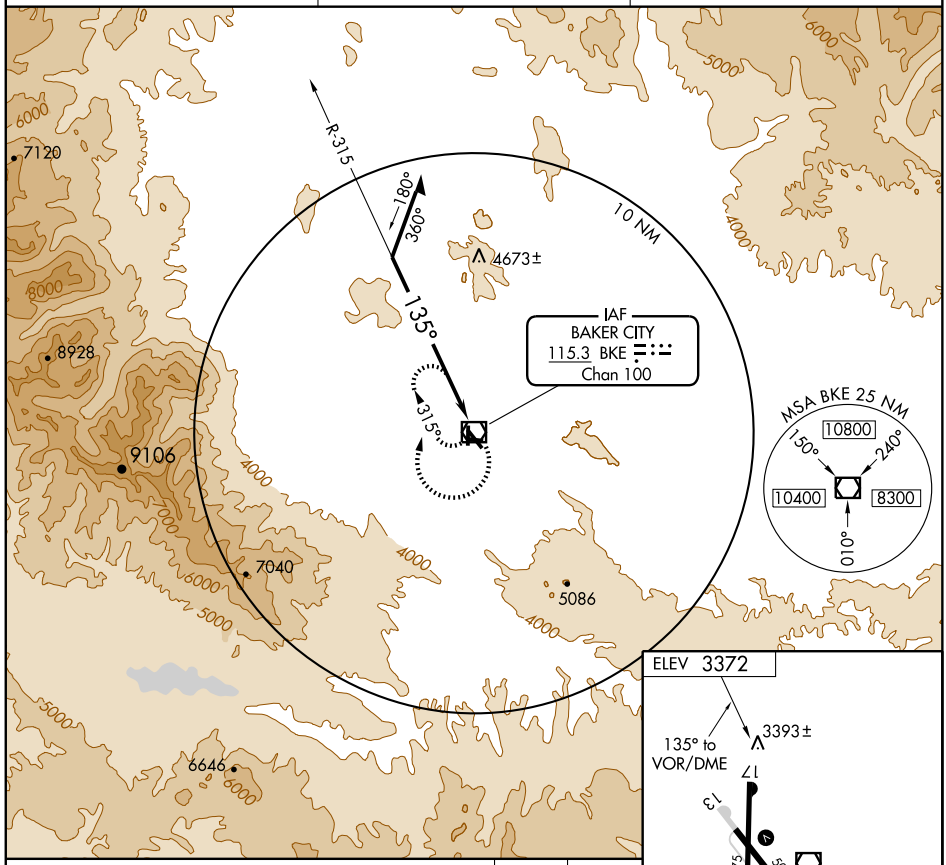
VOR/DME BKE 115.3 Chan 100	APP CRS 135°	Rwy Idg N/A TDZE N/A Apt Elev 3372

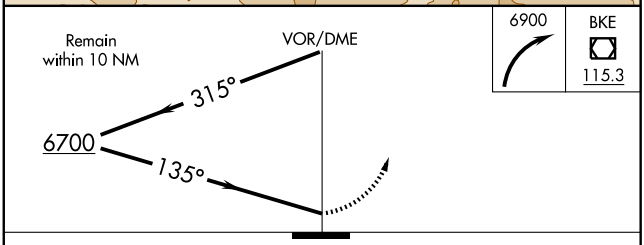
VOR-A

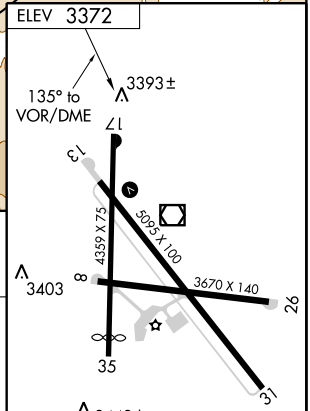
BAKER CITY MUNI (BKE)

MISSED APPROACH: Climbing right turn to 6900 in BKE VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
134.275	128.05 387.15	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5200-1¼ 1828 (1900-1¼)	5200-1½ 1828 (1900-1½)	5200-3 1828 (1900-3)	

MIRL Rwy 13-31 L

NW-1, 14 JAN 2010 to 11 FEB 2010

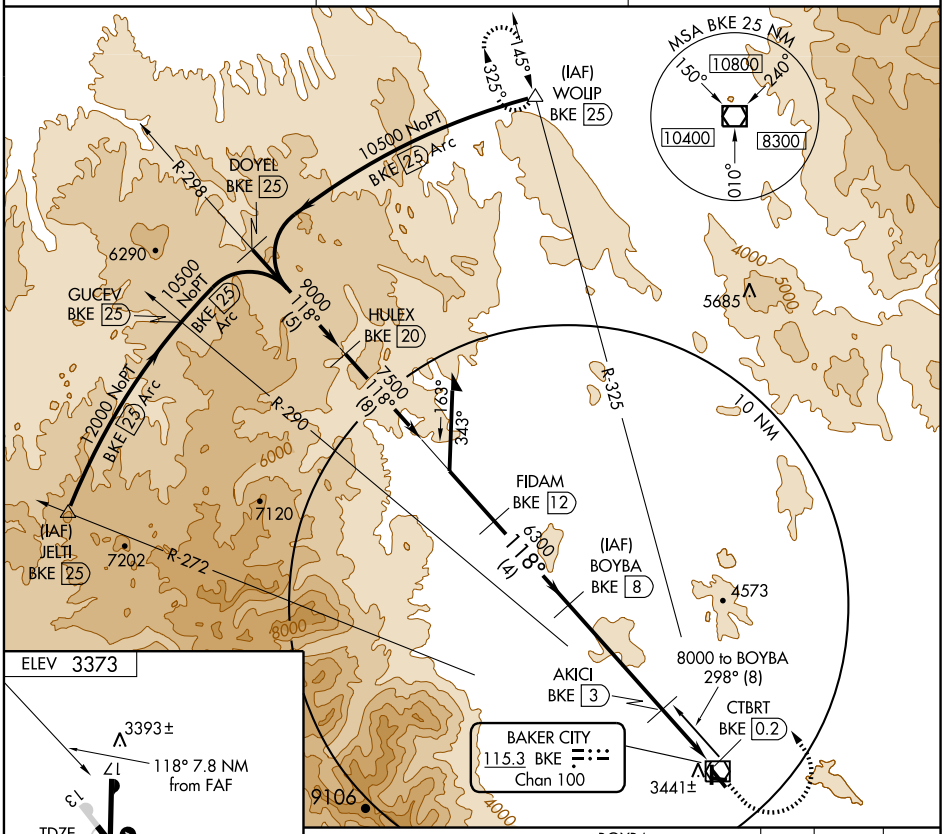
VOR/DME BKE	APP CRS	Rwy Idg	5095
115.3	118°	TDZE	3370
Chan 100		Apt Elev	3373

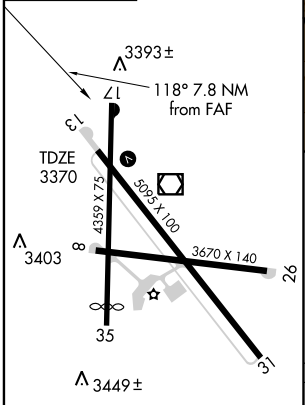
VOR/DME RWY 13

BAKER CITY MUNI (BKE)

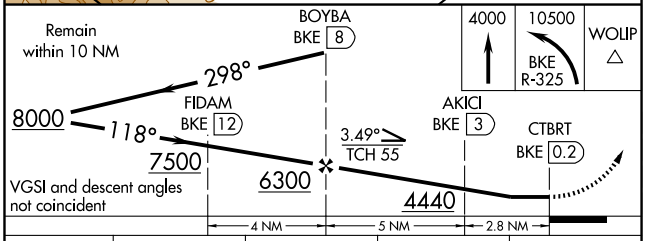
MISSED APPROACH: Climb to 4000 then climbing left turn to 10500 via BKE R-325 to WOLIP and hold.

ASOS	SALT LAKE CENTER	UNICOM
134.275	128.05 387.15	123.0 (CTAF) L





MIRL Rwy 13-31 L

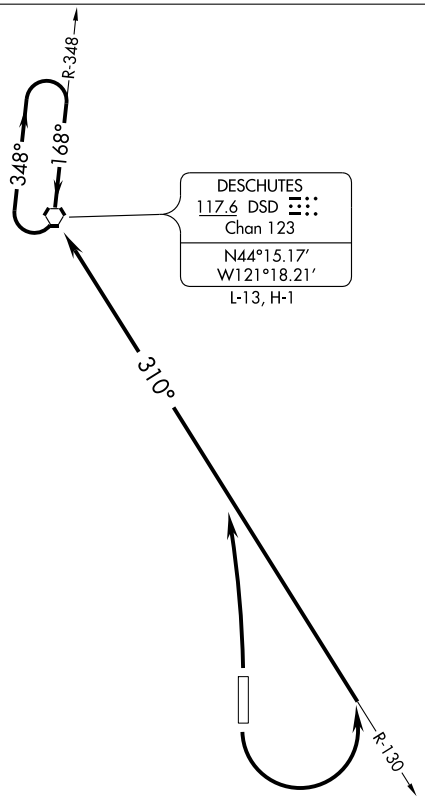


CATEGORY	A	B	C	D
S-13	4000-1	630 (700-1)	4000-1¾ 630 (700-1¾)	4000-2 630 (700-2)
CIRCLING	4000-1 627 (700-1)	4000-1 627 (700-1)	4000-1¾ 627 (700-1¾)	4220-2¾ 847 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

BEND ONE DEPARTURE (OBSTACLE)

SEATTLE CENTER
128.15 257.75
CTAF 123.0



TAKE-OFF MINIMUMS

Rwys 16, 34: Standard.

TAKE-OFF OBSTACLE NOTES

Rwy 16: Trees beginning 75' from DER, 412' left of centerline, up to 43' AGL/3572' MSL.
Trees beginning 432' from DER, 5' right of centerline, up to 37' AGL/3541' MSL.
Terrain beginning 27' from DER, 197' right of centerline, up to 3469' MSL.
Road 1' from DER, 414' left of centerline, 17' AGL/3466' MSL.

Rwy 34: Trees beginning 306' from DER, 178' left of centerline, up to 25' AGL/3436' MSL.
Road beginning 460' from DER, 414' left of centerline, up to 17' AGL/3425' MSL.
Bush 94' from DER, 443' left of centerline, 4' AGL/3407' MSL.
Terrain beginning 1' from DER, 147' left of centerline, up to 3408' MSL.
Trees beginning 52' from DER, 252' right of centerline, up to 39' AGL/3429' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climbing left turn to intercept DSD R-130 to DSD VORTAC, Thence . . . .

TAKE-OFF RUNWAY 34: Climbing left turn to intercept the DSD R-130 to DSD VORTAC, Thence . . . .

. . . . Climb in DSD VORTAC holding pattern to cross DSD VORTAC at or above the MEA/MCA for the route of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5200
326°	TDZE	3460
	Apt Elev	3460

RNAV (GPS) RWY 34

BEND MUNI (BDN)

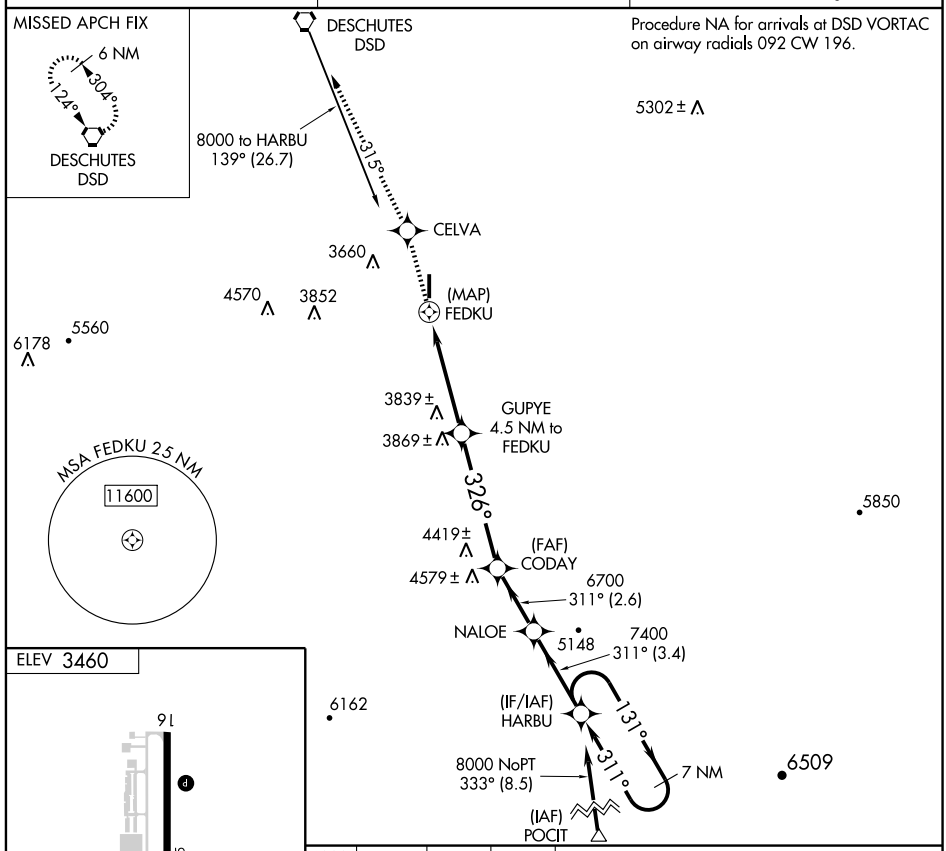
T NA — DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, LNAV Cats C/D visibility ¼ mile and Circling Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 6000 direct CELVA and via 315° track to DESCHUTES VORTAC and hold

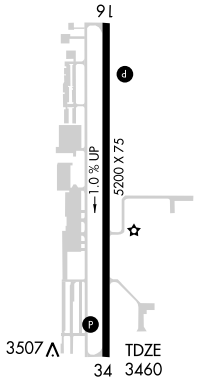
AWOS-3	SEATTLE CENTER	UNICOM
134.425	128.15 257.75	123.0 (CTAF) L

MISSED APCH FIX

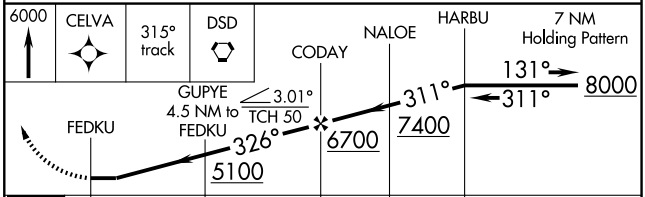
Procedure NA for arrivals at DSD VORTAC on airway radials 092 CW 196.



ELEV 3460



MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LNAV MDA	4100-1	640 (700-1)	4100-1¾ 640 (700-1¾)	4100-2 640 (700-2)
CIRCLING	4100-1	640 (700-1)	4100-1¾ 640 (700-1¾)	4100-2 640 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) Y RWY 16

BEND MUNI (BDN)

APP CRS	Rwy Idg	5200
150°	TDZE	3432
	Apt Elev	3460

DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, and LNAV Cats C/D visibility ¼ mile, and circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 7400 direct HITUP and left turn via 041° track to HATMO and hold, continue climb-in-hold to 7400.

AWOS-3	SEATTLE CENTER	UNICOM
134.425	128.15 257.75	123.0 (CTAF) L

(IAF) HORRN
9000 NoPT 114° (10)
6536 ±
BOTTL
6100 114° (10)
(IAF) HERLD
6100 NoPT 127° (10)
(IAF) HERBS
6100 NoPT 167° (10)
5710
(IAF) DUMMP
6100 NoPT 210° (10)
6 NM
124°
304°
(IAF) EENIE
7900 NoPT 081° (5)
TABSE
6100 081° (10)
9500 NoPT 066° (6)
(IAF) SNOKY
FOSNI
6100 066° (10)
(IF/IAF) DESCHUTES DSD
5700 124° (3)
FOGIV
4800 124° (3)
(FAF) COMEK
5302 ±
MISSED APCH FIX
104° 7 NM
284°
HATMO
MSA RW16 25 NM
11600
150°
3660
RW16
3549 ±
4570
3852
6200 to VORTAC 323° (15)
URBIA
041°
HITUP

ELEV 3460
150° to RW16
TDZE 3432
1.0 % UP
5200 X 75
3507
34
MIRL Rwy 16-34 L

6 NM Holding Pattern
VORTAC
FOGIV
COMEK
6100
304°
124°
124°
5700
2.91°
TCH 50
4800
150°
RW16
3 NM
3 NM
4.4 NM
7400
HITUP
041° track
HATMO

CATEGORY	A	B	C	D
LNAV MDA	3800-1 368 (400-1)			3800-1¼ 368 (400-1¼)
CIRCLING	3940-1 480 (500-1)	3980-1 520 (600-1)	4000-1½ 540 (600-1½)	4040-2 580 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5200
CH 81906	161°	TDZE	3432
W16A		Apt Elev	3460

RNAV (GPS) Z RWY 16

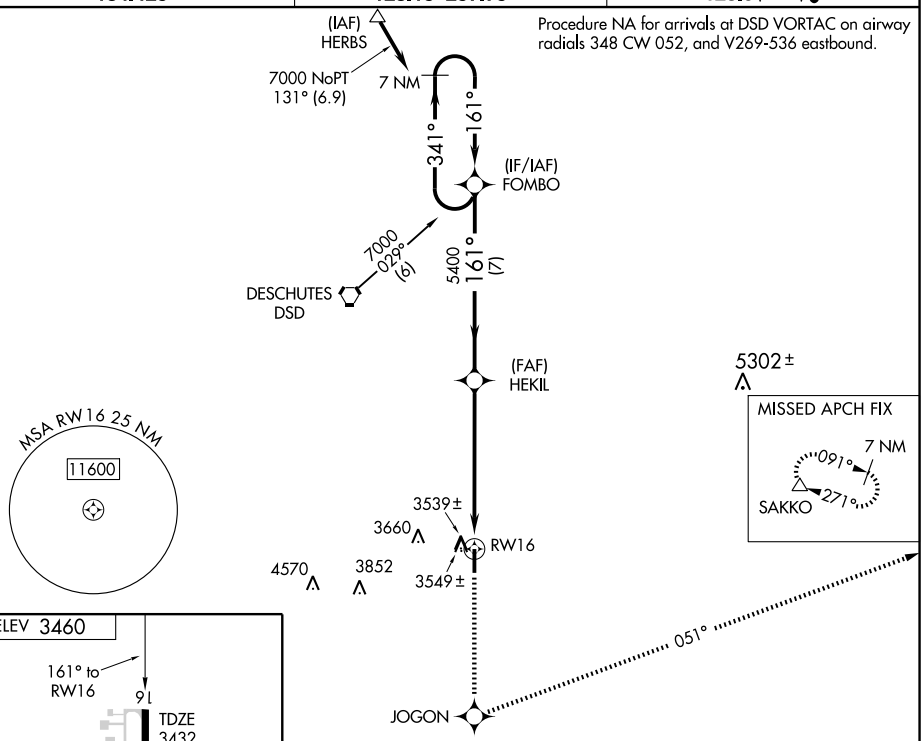
BEND MUNI (BDN)

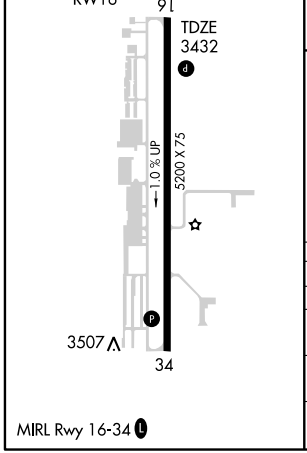
When local altimeter setting not received, use Redmond altimeter setting and increase all DA/MDAs by 80 feet, LPV visibilities ¼ mile all Cats, LNAV/VNAV visibilities ¼ mile all Cats, LNAV Cat D visibility ¼ mile, and circling Cat C visibility ¼ mile.
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 42°C (107°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 9500 direct JOGON and left turn via 051° track to SAKKO and hold, continue climb-in-hold to 9500.

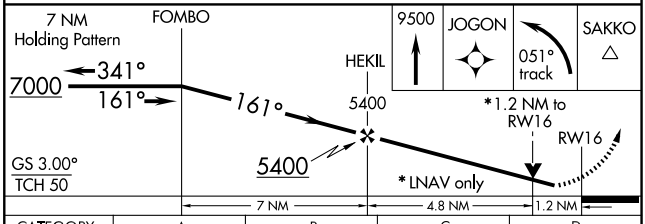
AWOS-3	SEATTLE CENTER	UNICOM
134.425	128.15 257.75	123.0 (CTAF) L

Procedure NA for arrivals at DSD VORTAC on airway radials 348 CW 052, and V269-536 eastbound.





MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	3682-1 250 (300-1)			
LNAV/VNAV DA	3809-1½ 377 (400-1½)			
LNAV MDA	3840-1 408 (400-1)		3840-1¼ 408 (400-1¼)	
CIRCLING	3940-1 480 (500-1)	3980-1 520 (600-1)	4000-1½ 540 (600-1½)	4040-2 580 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC DSD	APP CRS	Rwy Idg	5200
117.6	136°	TDZE	3432
Chan 123		Apt Elev	3460

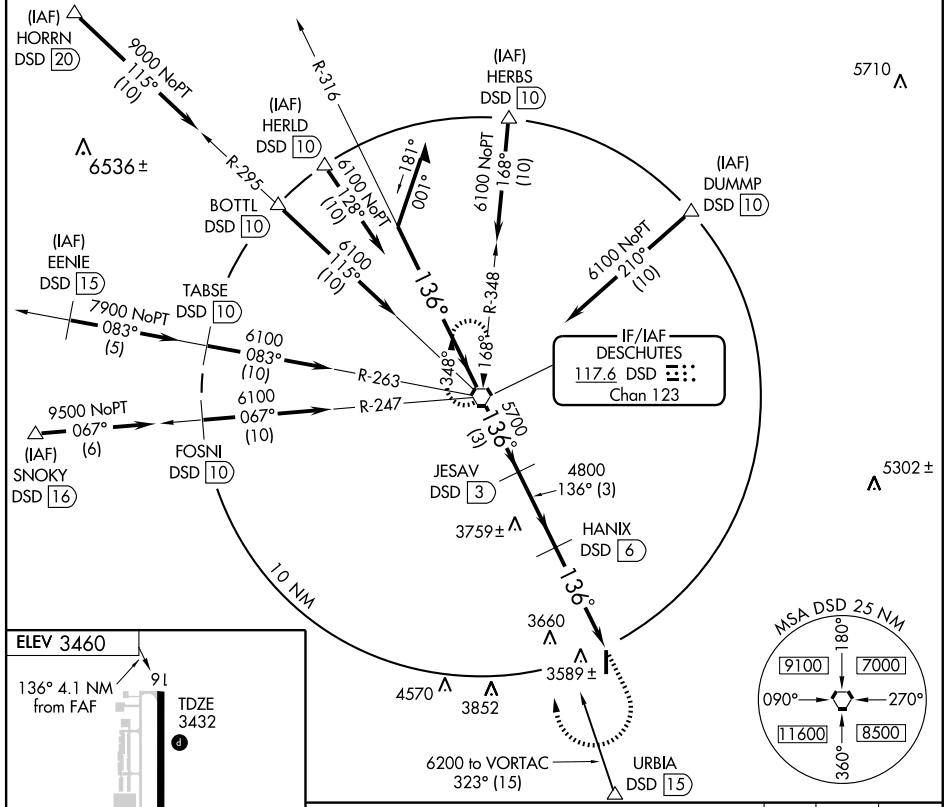
VOR/DME RWY 16

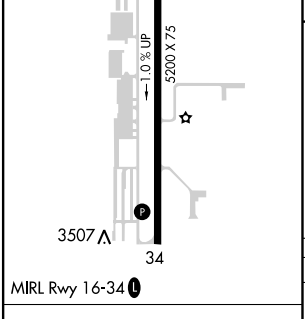
BEND MUNI(BDN)

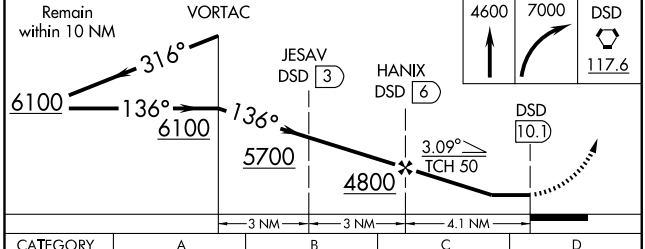
T A NA When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, increase S-16 Cat D visibility ¼ mile, and circling Cat C visibility ¼ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4600 then climbing right turn to 7000 direct DSD VORTAC and hold.

AWOS-3	SEATTLE CENTER	UNICOM
134.425	128.15 257.75	123.0 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-16	3840-1 408 (400-1)		3840-1¼ 408 (400-1¼)	
CIRCLING	3940-1 480 (500-1)	3980-1 520 (600-1)	4000-1½ 540 (600-1½)	4040-2 580 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5100
297°	TDZE	4148
	Apt Elev	4148

RNAV (GPS) RWY 30
BURNS MUNI (BNO)

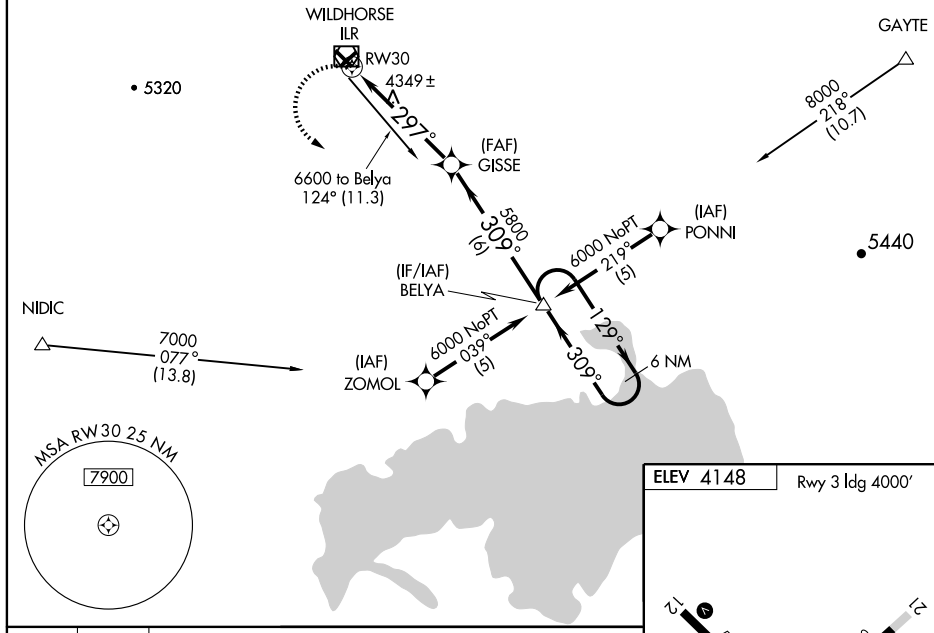
NA

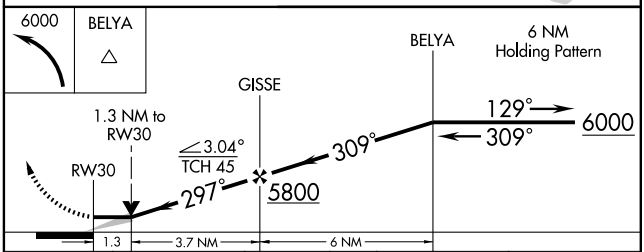
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 6000 direct BELYA and hold.

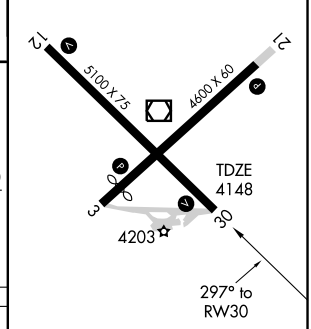
ASOS	MINNVILLE RADIO	UNICOM
135.575	122.5	122.8 (CTAF) L

Procedure NA for arrival at NIDIC via V357 southwestbound.
Procedure NA for arrival at GAYTE via V330 eastbound.
NoPT for arrival at ILR VOR/DME via V497 northwestbound.





CATEGORY	A	B	C	D
LNAV MDA	4600-1 452 (500-1)		4600-1¼ 452 (500-1¼)	4600-1½ 452 (500-1½)
CIRCLING	4600-1 452 (500-1)	4680-1 532 (600-1)	4680-1½ 532 (600-1½)	4720-2 572 (600-2)



REIL Rwys 3, 12, 21 and 30 L
MIRL Rwys 3-21 and 12-30 L

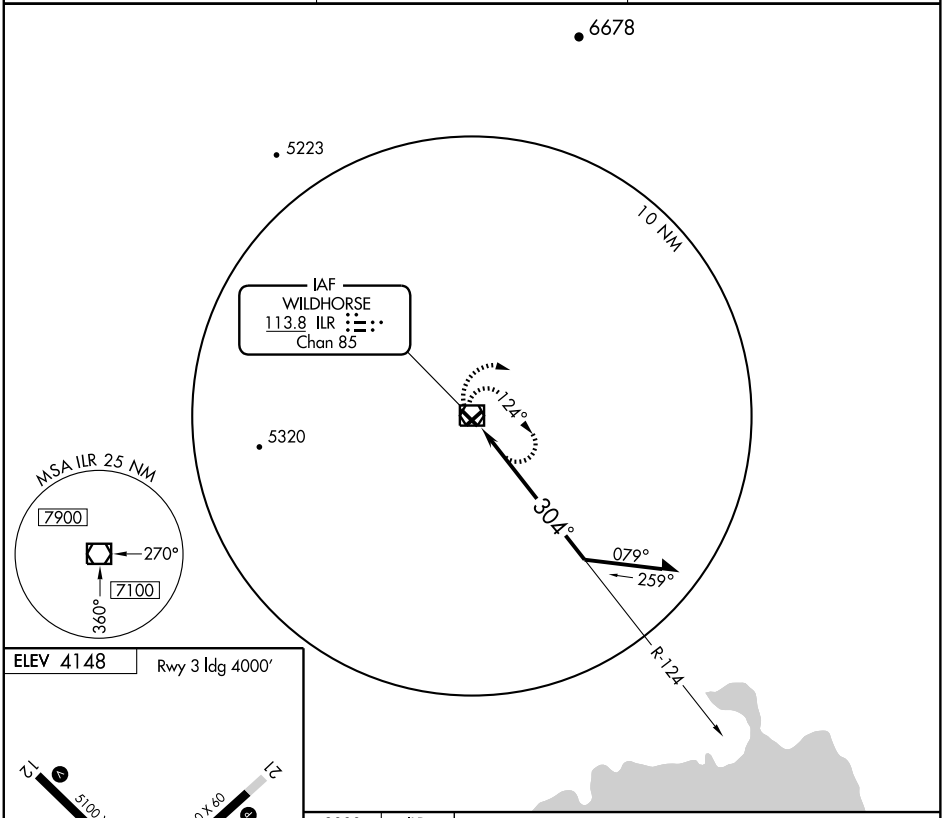
NW-1, 14 JAN 2010 to 11 FEB 2010

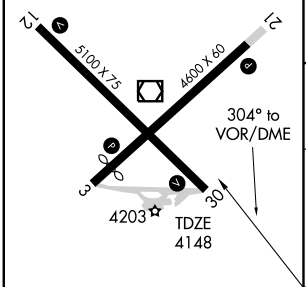
VOR/DME ILR	APP CRS	Rwy Idg	5100
113.8	304°	TDZE	4148
Chan 85		Apt Elev	4148

VOR RWY 30
BURNS MUNI (BNO)

MISSED APPROACH: Climbing right turn to 8000 in ILR VOR/DME holding pattern.

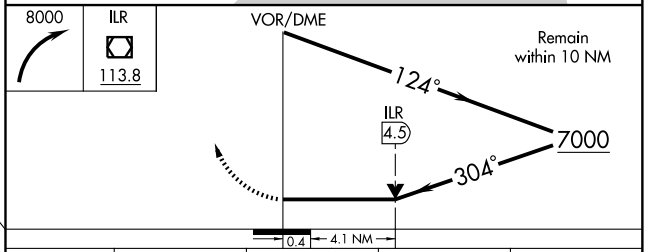
ASOS	MINNVILLE RADIO	UNICOM
135.575	122.5	122.8 (CTAF) L





REIL Rwys 3, 12, 21 and 30 L
MIRL Rwys 3-21 and 12-30 L

Knots	60	90	120	150	180
Min:Sec					

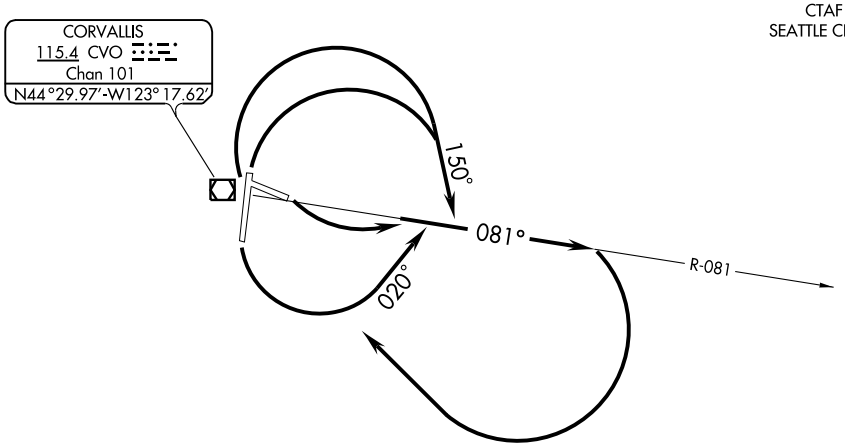


CATEGORY	A	B	C	D
S-30	5500-1¼ 1352 (1400-1¼)	5500-1½ 1352 (1400-1½)	5500-3	1352 (1400-3)
CIRCLING	5500-1¼ 1352 (1400-1¼)	5500-1½ 1352 (1400-1½)	5500-3	1352 (1400-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

CORVALLIS ONE DEPARTURE

AWOS-3 135.775
CASCADE DEP CON ★
127.5 348.7
CTAF 123.0
SEATTLE CENTER
125.8



TAKEOFF MINIMUMS

Rwy 9, 200-1 or standard with minimum climb of 245′ per NM to 500.
Rwys 17/35, standard.
Rwy 27, standard with minimum climb of 310′ per NM to 2300.

TAKEOFF OBSTACLE NOTES

Rwy 9: Multiple trees and railroad beginning 549′ from departure end of runway, 254′ left of centerline, up to 153′ AGL/383′ MSL.
Multiple trees and railroad beginning 670′ from departure end of runway, 5′ right of centerline, up to 135′ AGL/380′ MSL.

Rwy 27: OL on GS 409′ from departure end of runway, 325′ left of centerline, 28′ AGL/273′ MSL.

Rwy 35: Multiple trees beginning 470′ from departure end of runway, 544′ left of centerline, up to 36′ AGL/276′ MSL.
Tree 2.3 NM from departure end of runway, 1976′ left of centerline, 128′ AGL/607′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn to 3000 via CVO R-081, thence. . . .

TAKE-OFF RUNWAY 17: Climbing left turn to 3000 via heading 020° and CVO R-081, thence. . . .

TAKE-OFF RUNWAYS 27 and 35: Climbing right turn to 3000 via heading 150° and CVO R-081, thence. . . .

.... climbing right turn to 4000 direct CVO VOR/DME. Continue climb on course to MEA for route of flight.

LOST COMMUNICATIONS: If not contact with ATC upon reaching 3000′, continue climb to assigned altitude direct CVO VOR/DME. Thence via assigned route of flight.

LOC I-CVO	APP CRS	Rwy Idg	5900
111.9	169°	TDZE	244
		Apt Elev	246

ILS RWY 17
CORVALLIS MUNI (CVO)

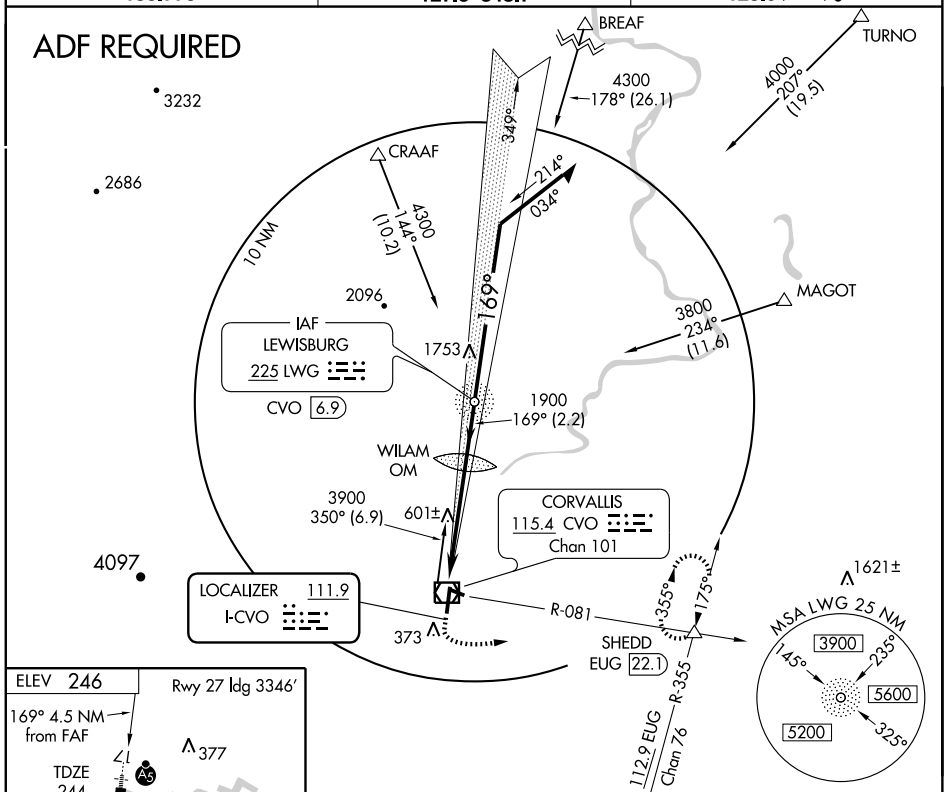
T
NA

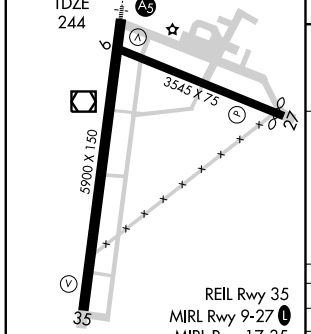
MALSR

MISSED APPROACH: Climb to 900 then climbing left turn to 3000 via the CVO R-081 to SHEDD Int and hold.

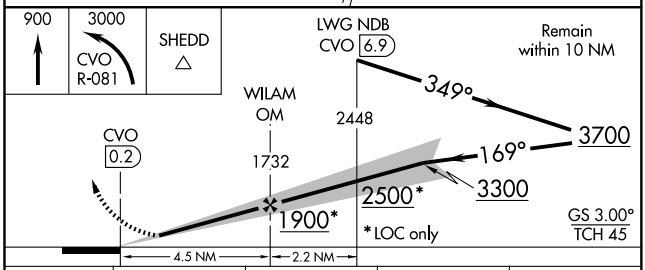
AWOS-3	CASCADE APP CON★	UNICOM
135.775	127.5 348.7	123.0 (CTAF) L

ADF REQUIRED





FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30



CATEGORY	A	B	C	D
S-ILS 17	444-½ 200 (200-½)			
S-LOC 17	860-½ 616 (700-½)		860-1¼ 616 (700-1¼)	860-1½ 616 (700-1½)
CIRCLING	860-1 614 (700-1)		860-1¾ 614 (700-1¾)	880-2 634 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB LWG 225	APP CRS 170°	Rwy Idg 5900 TDZE 244 Apt Elev 246

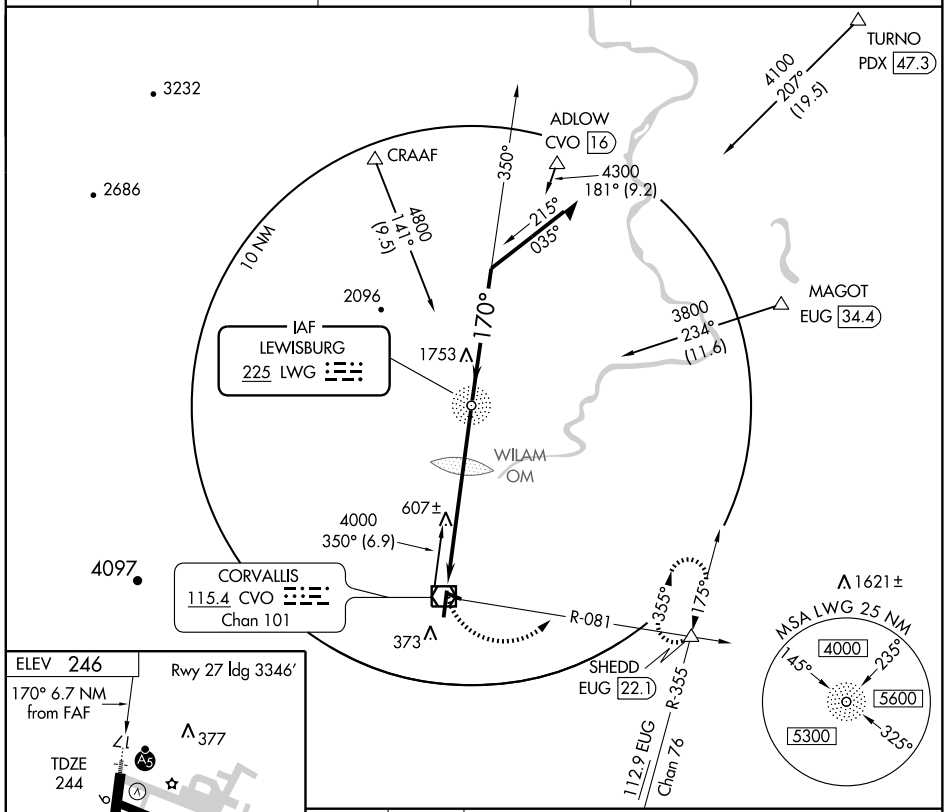
NDB RWY 17
CORVALLIS MUNI (CVO)

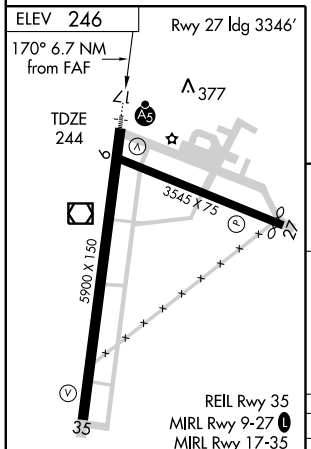
T
NA

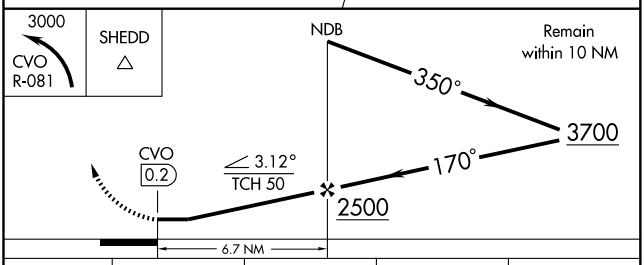
MALSR

MISSED APPROACH: Climbing left turn to 3000 via the CVO R-081 to SHEDD Int/EUG 22.1 DME and hold.

AWOS-3	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	123.0 (CTAF) L







FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

CATEGORY	A	B	C	D
S-17	960-¾ 716 (800-¾)		960-1½ 716 (800-1½)	960-2 716 (800-2)
CIRCLING	960-1 714 (800-1)		960-2 714 (800-2)	960-2¼ 714 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5900
CH 78311	169°	TDZE	248
W17A		Apt Elev	250

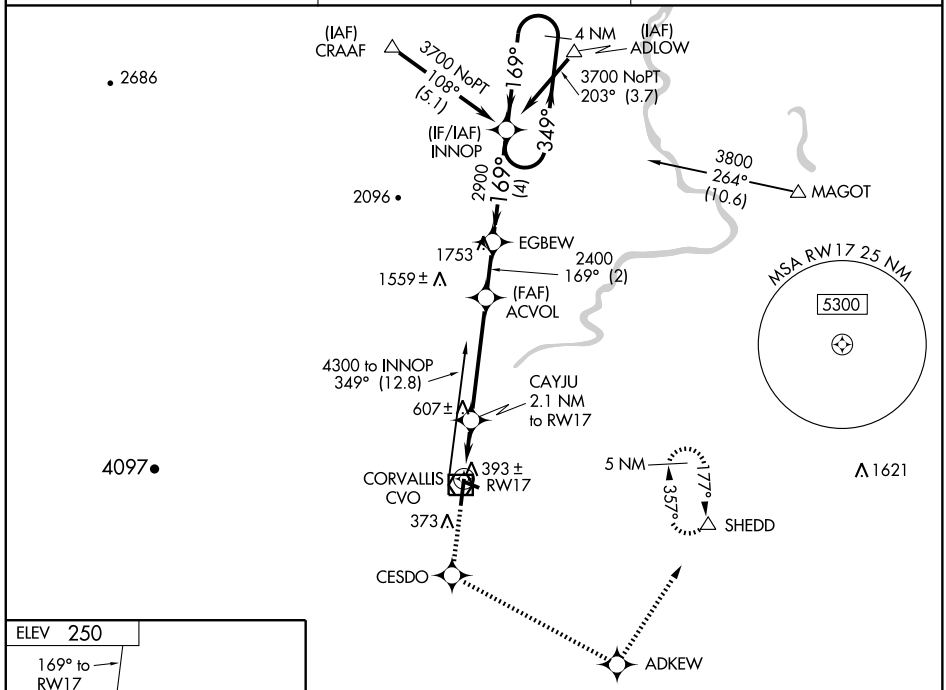
RNAV (GPS) RWY 17
CORVALLIS MUNI (CVO)

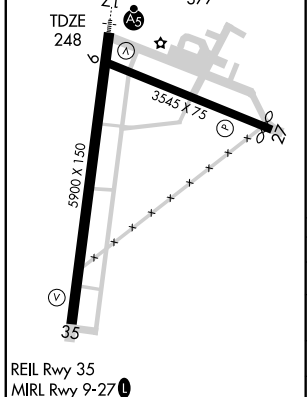
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. Inoperative table does not apply to LNAV Cats A and B. For inoperative MALSR increase LNAV Cats C and D visibility to 1¼.

MALSR

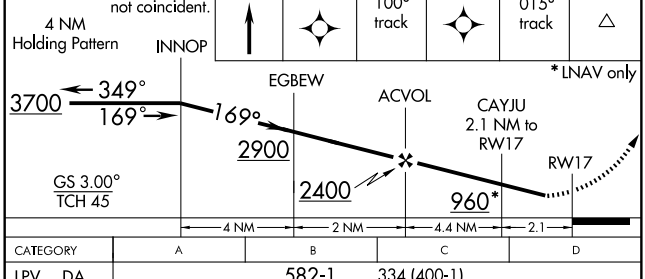
MISSED APPROACH: Climb to 3000 direct CESDO and via 100° track to ADKEW and via 015° track to SHEDD and hold.

AWOS-3	CASCADE APP CON *	UNICOM
135.775	127.5 348.7	123.0 (CTAF) L





REIL Rwy 35
MIRL Rwy 9-27 L
MIRL Rwy 17-35



CATEGORY	A	B	C	D
LPV DA	582-1		334 (400-1)	
LNAV/VNAV DA	670-1		422 (500-1)	
LNAV MDA	660-1		412 (500-1)	
CIRCLING	720-1 470 (500-1)		720-1½ 470 (500-1½)	900-2 650 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

CORVALLIS, OREGON

AL-782 (FAA)

APP CRS	Rwy Idg	5900
349°	TDZE	246
	Apt Elev	246

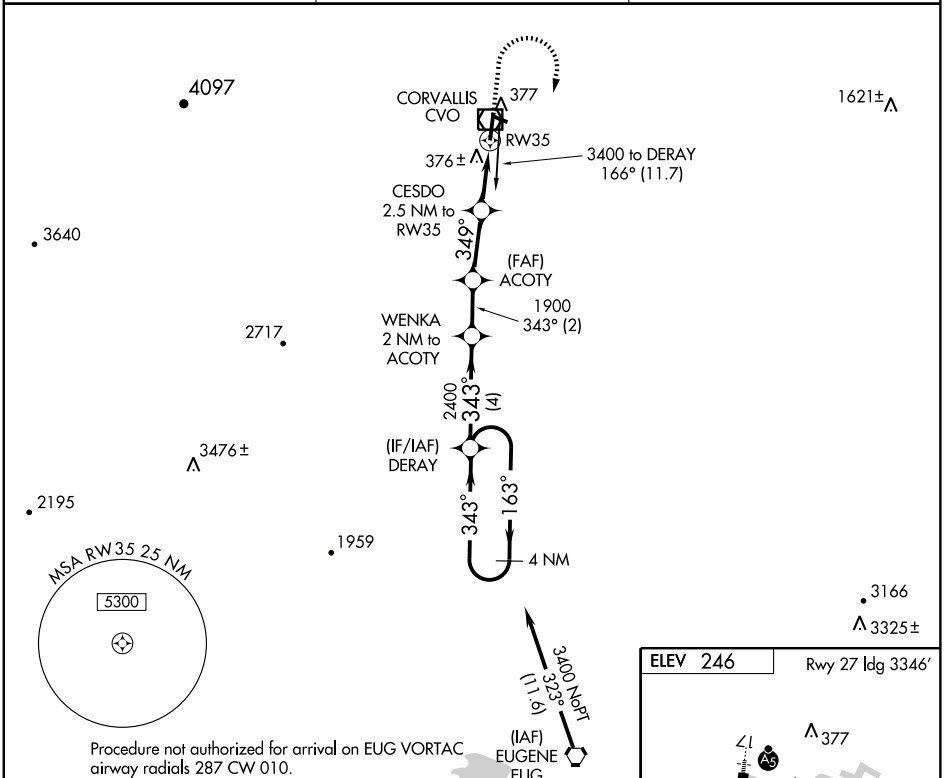
RNAV (GPS) RWY 35

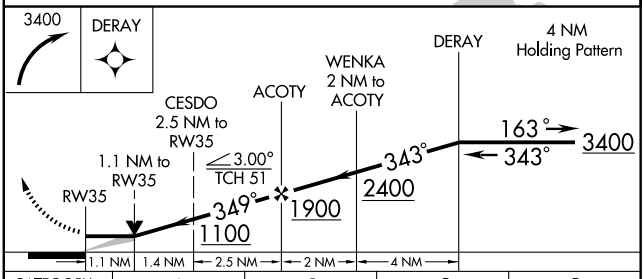
CORVALLIS MUNI (CVO)

T
A NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

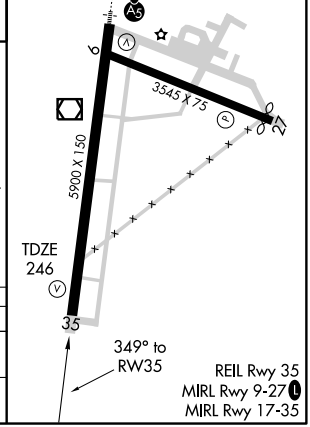
MISSED APPROACH: Climbing right turn to 3400 direct DERAY WP and hold.

AWOS-3	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	660-1 414 (500-1)		660-1¼ 414 (500-1¼)	
CIRCLING	720-1 474 (500-1)		720-1½ 474 (500-1½)	840-2 594 (600-2)

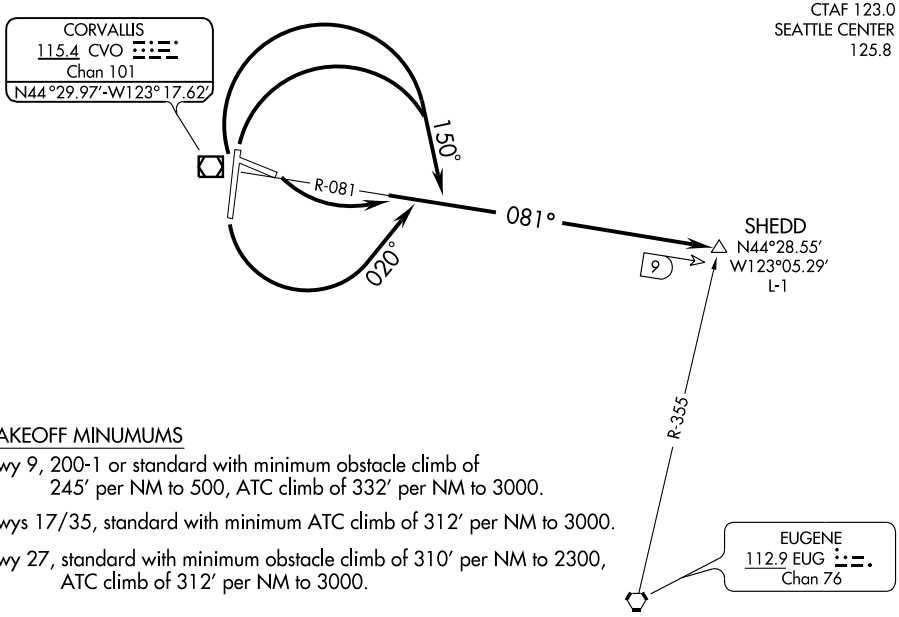


NW-1, 14 JAN 2010 to 11 FEB 2010

SHEDD ONE DEPARTURE

CORVALLIS MUNI (CVO)
CORVALLIS, OREGON

AWOS-3 135.775
CASCADE DEP CON ★
127.5 348.7
CTAF 123.0
SEATTLE CENTER
125.8



TAKEOFF MINUMUMS

Rwy 9, 200-1 or standard with minimum obstacle climb of 245′ per NM to 500, ATC climb of 332′ per NM to 3000.

Rwys 17/35, standard with minimum ATC climb of 312′ per NM to 3000.

Rwy 27, standard with minimum obstacle climb of 310′ per NM to 2300, ATC climb of 312′ per NM to 3000.

TAKEOFF OBSTACLE NOTES

Rwy 9: Multiple trees and railroad beginning 549′ from departure end of runway, 254′ left of centerline, up to 153′ AGL/383′ MSL.
Multiple trees and railroad beginning 670′ from departure end of runway, 5′ right of centerline, up to 135′ AGL/380′ MSL.

Rwy 27: OL on GS 409′ from departure end of runway, 325′ left of centerline, 28′ AGL/273′ MSL.

Rwy 35: Multiple trees beginning 470′ from departure end of runway, 544′ left of centerline, up to 36′ AGL/276′ MSL.
Tree 2.3 NM from departure end of runway, 1976′ left of centerline, 128′ AGL/607′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn to 3000 via CVO R-081 to SHEDD INT, thence. . . .

TAKE-OFF RUNWAY 17: Climbing left turn to 3000 via heading 020° and CVO R-081 to SHEDD INT, thence. . . .

TAKE-OFF RUNWAYS 27 and 35: Climbing right turn to 3000 via heading 150° and CVO R-081 to SHEDD INT, thence. . . .

. . . .via assigned route/clearance.

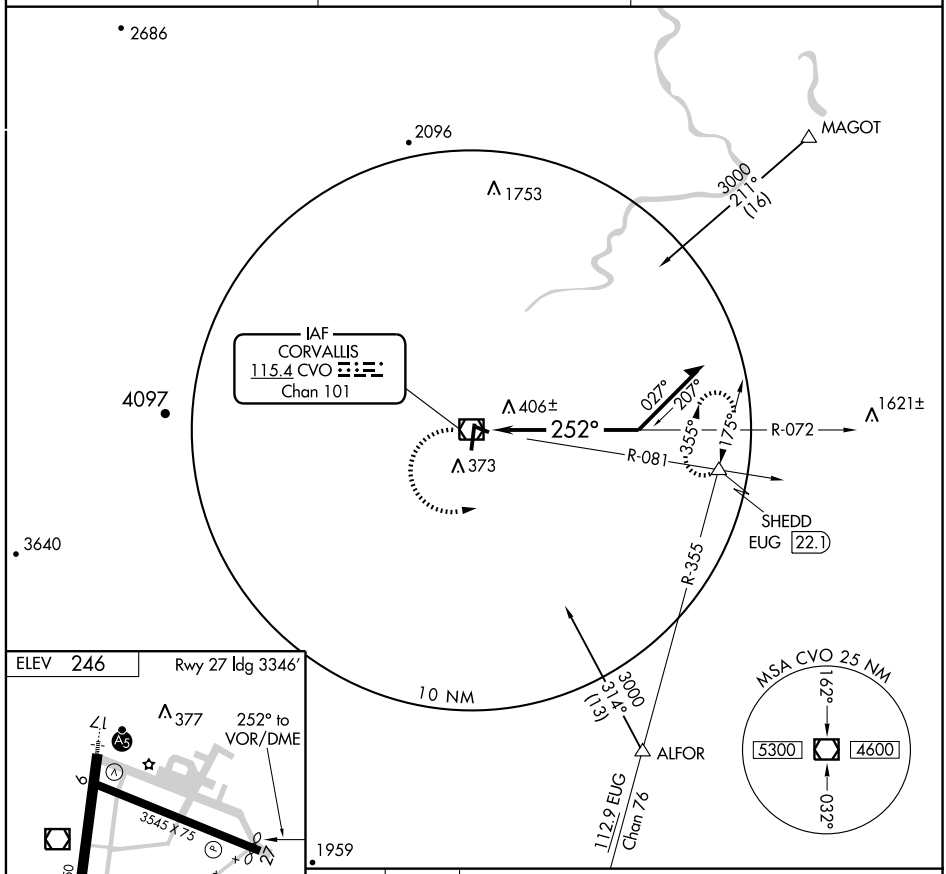
LOST COMMUNICATIONS: If not contact with ATC upon reaching 3000′, continue climb to assigned altitude direct CVO VOR/DME. Thence via assigned route of flight.

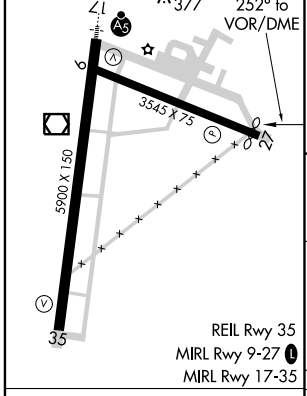
VOR/DME CVO	APP CRS	Rwy Idg	N/A
115.4	252°	TDZE	N/A
Chan 101		Apt Elev	246

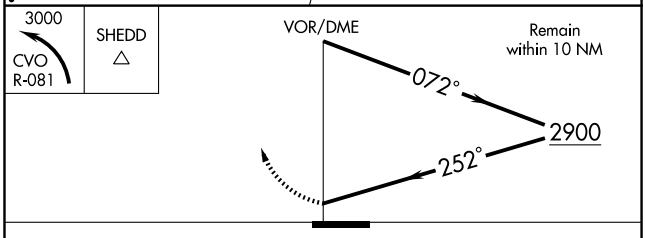
VOR-A
CORVALLIS MUNI (CVO)

MISSED APPROACH: Climbing left turn to 3000 via CVO VOR/DME R-081 to SHEDD Int/EUG 22.1 DME and hold.

AWOS-3	CASCADE APP CON★	UNICOM
135.775	127.5 348.7	123.0 (CTAF)







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	1400-1¼ 1154 (1200-1¼)	1400-1½ 1154 (1200-1½)	1400-3 1154 (1200-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME CVO	APP CRS	Rwy Idg	5900
115.4	177°	TDZE	244
Chan 101		Apt Elev	246

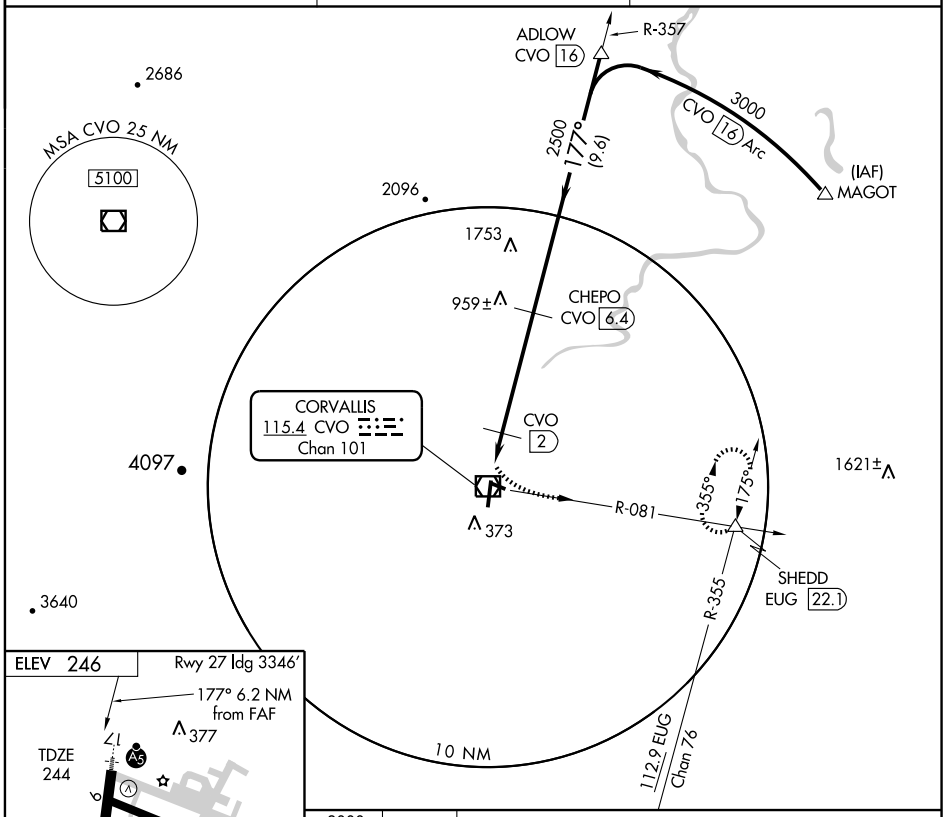
VOR/DME RWY 17
CORVALLIS MUNI (CVO)

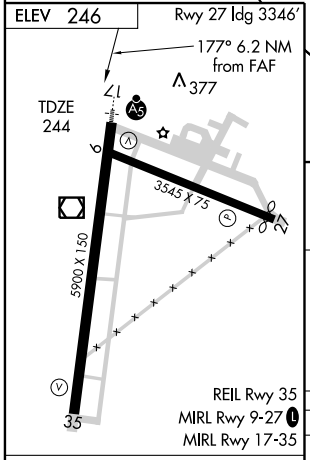
For inoperative MALSR, increase S-17 Cat. D to 1¼ mile.

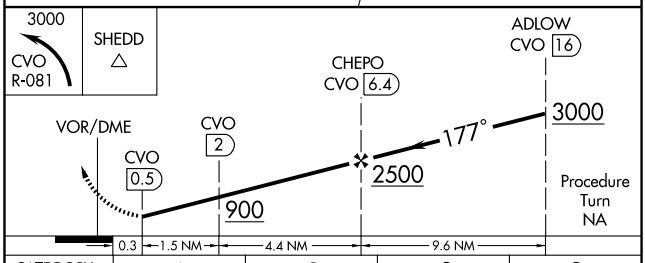
MALSR

MISSED APPROACH: Climbing left turn to 3000 via CVO R-081 to SHEDD Int and hold.

AWOS-3	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	123.0 (CTAF)







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-17	660-½ 416 (500-½)		660-¾ 416 (500-¾)	660-1 416 (500-1)
CIRCLING	720-1 474 (500-1)		720-1½ 474 (500-1½)	880-2 634 (700-2)

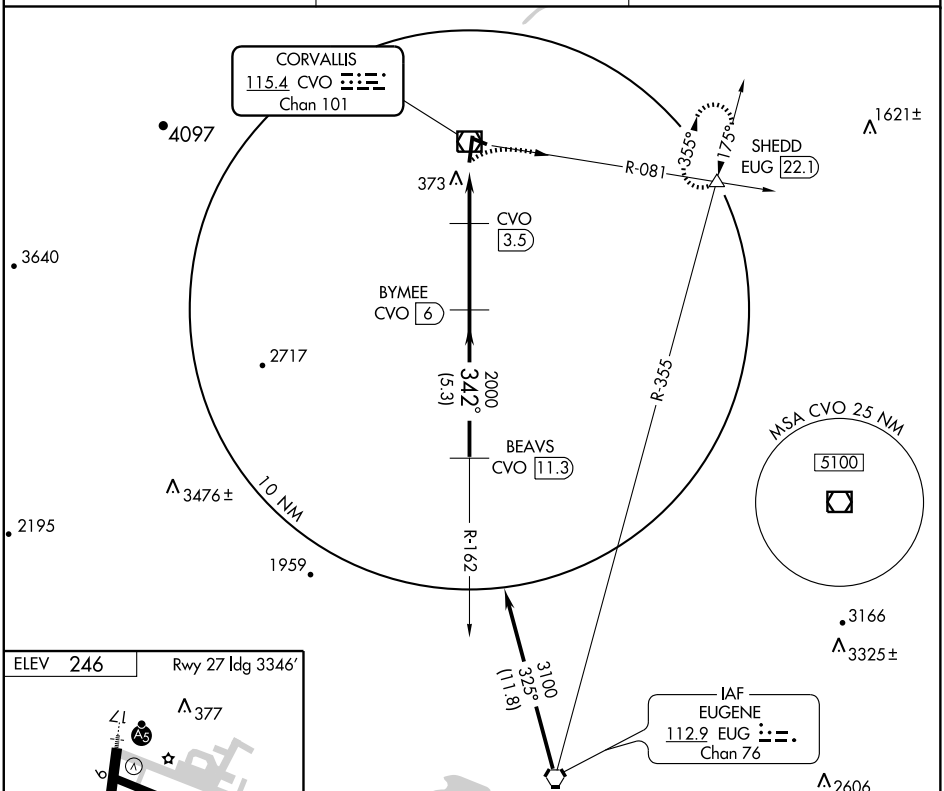
NW-1, 14 JAN 2010 to 11 FEB 2010

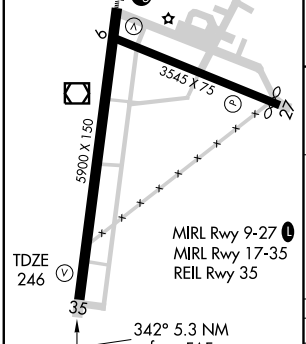
VOR/DME CVO	APP CRS	Rwy Idg	5900
115.4	342°	TDZE	246
Chan 101		Apt Elev	246

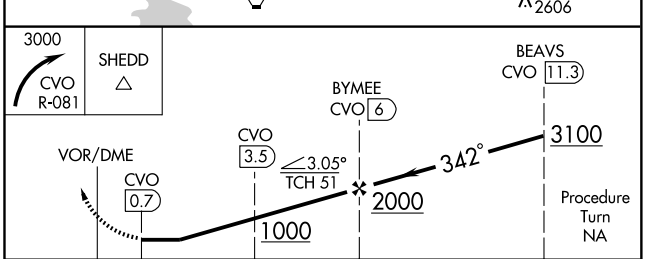
VOR/DME RWY 35
CORVALLIS MUNI (CVO)

MISSED APPROACH: Climbing right turn to 3000 via CVO R-081to SHEDD Int and hold.

AWOS-3	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	123.0 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

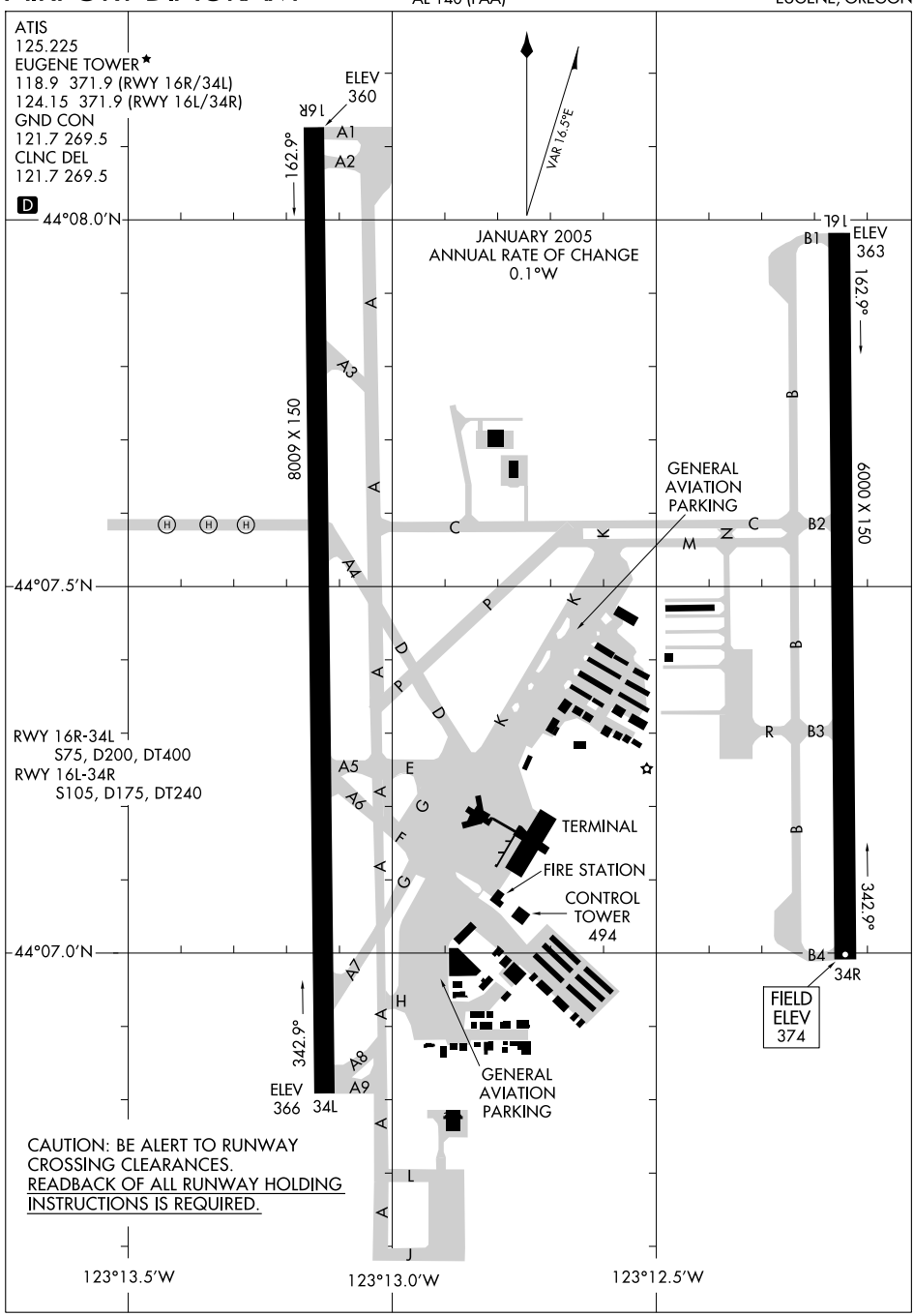
CATEGORY	A	B	C	D
S-35	640-1 394 (400-1)			640-1¼ 394 (400-1¼)
CIRCLING	720-1 474 (500-1)		720-1½ 474 (500-1½)	880-2 634 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

EUGENE/MAHLON SWEET FIELD (EUG)
EUGENE, OREGON

AL-140 (FAA)



NW-1, 14 JAN 2010 to 11 FEB 2010

EUGENE SEVEN DEPARTURE

SL-140 (FAA)

EUGENE/MAHLON SWEET FIELD (EUG)
EUGENE, OREGON

ATIS 125.225
GND CON
121.7 269.5
EUGENE TOWER ★
118.9 (CTAF) 371.9 (Rwy 16R-34L)
124.15 371.9 (Rwy 16L-34R)
CASCADE DEP CON
119.6 348.7

BATTLEGROUND
116.6 BTG
Chan 113
N45°44.87′ - W122°35.49′
L-1, H-1

NEWBERG
117.4 UBG
Chan 121
N45°21.19′ - W122°58.69′
L-1, H-1

CORVALLIS
115.4 CVO
Chan 101
N44°29.97′
W123°17.62′
L-1

NEWPORT
117.1 ONP
Chan 118
N44°34.52′ - W124°03.64′
L-1, H-1

340°
R-355
355°
175°
160°

EUGENE
112.9 EUG
Chan 76
N44°07.25′ - W123°13.37′
L-1, H-1

DESCHUTES
117.6 DSD
Chan 123
N44°15.17′ - W121°18.21′
L-13, H-1

TAKE-OFF OBSTACLE NOTES

Rwy 16R: Tree 1992′ from DER, 832′ left of centerline, 50′ AGL/419′ MSL.

Rwy 16L: Multiple trees and power poles beginning 872′ from DER, 35′ right of centerline, up to 50′ AGL/437′ MSL.
Multiple trees and power poles beginning 890′ from DER, 77′ left of centerline, up to 50′ AGL/433′ MSL.

Rwy 34R: Multiple trees beginning 2869′ from DER, 186′ right of centerline, up to 50′ AGL/447′MSL.
Tree 2535′ from DER, 652′ left of centerline, 50′ AGL/428′ MSL.

NORTH BEND
112.1 OTH
Chan 58
N43°24.93′ - W124°10.11′
L-1

ROSEBURG
108.2 RBG
Chan 19
N43°10.95′ - W123°21.13′
L-1

ROGUE VALLEY
113.6 OED
Chan 83
N42°28.77′ - W122°54.78′
L-2, H-3

KLAMATH FALLS
115.9 LMT
Chan 106
N42°09.19′
W121°43.65′
L-2, H-3

TAKE-OFF MINIMUMS

Rwy 16L/16R: Standard with minimum climb of 305′ per NM to 6000.

Rwy 34L/34R: Standard with minimum climb of 320′ per NM to 6000.

NOTE: Aircraft taxiing beyond Rwy 16R departure end 500′ left of centerline.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L and 16R: Climb via heading 160° (or ATC assigned heading) for vectors to assigned route/fix . . . .

TAKE-OFF RUNWAYS 34L and 34R: Climb via heading 340° (or ATC assigned heading) for vectors to assigned route/fix . . . .

. . . . maintain 9000 or assigned altitude, expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If not in contact with ATC after reaching 3000′, continue climb to assigned altitude direct EUG VORTAC, climb in EUG VORTAC holding pattern (hold N, RT, 175° inbound) to cross EUG VORTAC at or above MEA before proceeding enroute.

APP CRS	Rwy Idg	8009
160°	TDZE	363
	Apt Elev	374

GPS RWY 16R

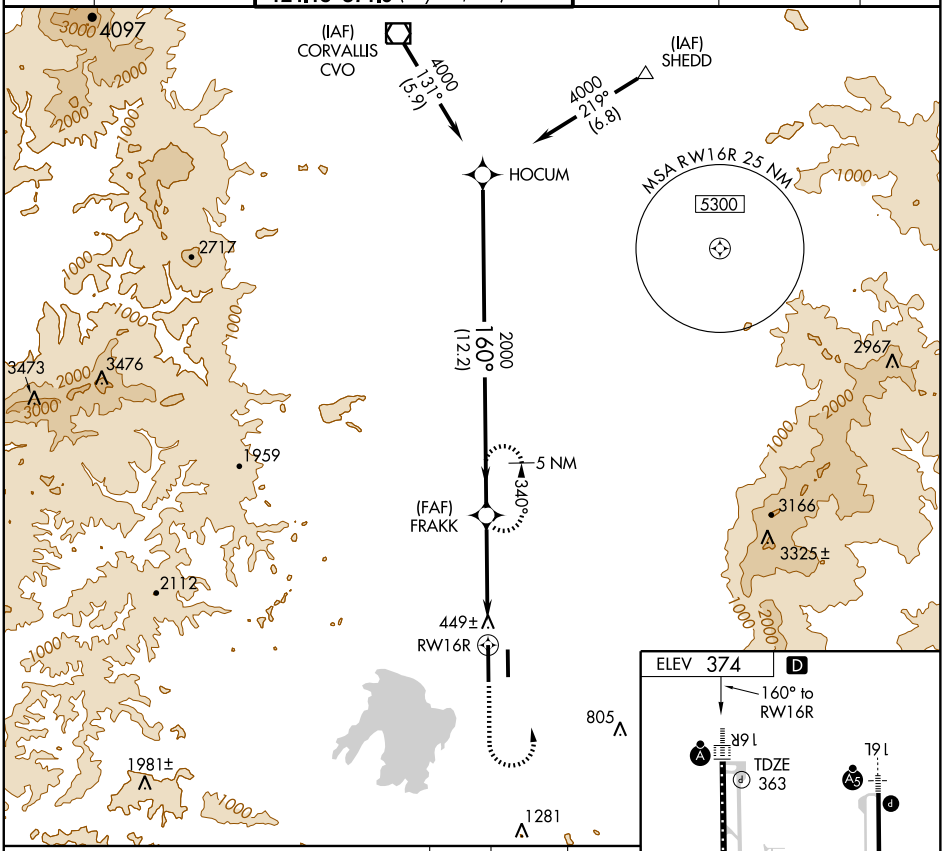
EUGENE/MAHLON SWEET FIELD (EUG)

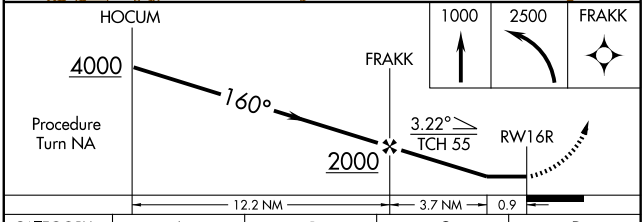
NA Inoperative table does not apply to S-16R Cat D.

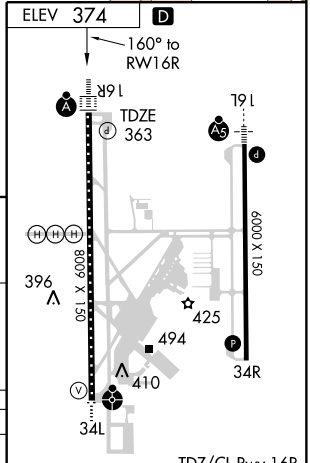
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing left turn to 2500 direct FRAKK WP and hold.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
S-16R	700/24 337 (400-½)			700/50 337 (400-1)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16L-34R and 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-ADE	APP CRS	Rwy Idg	6000
111.75	160°	TDZE	369
Chan 54 (Y)		Apt Elev	374

ILS or LOC/DME RWY 16L

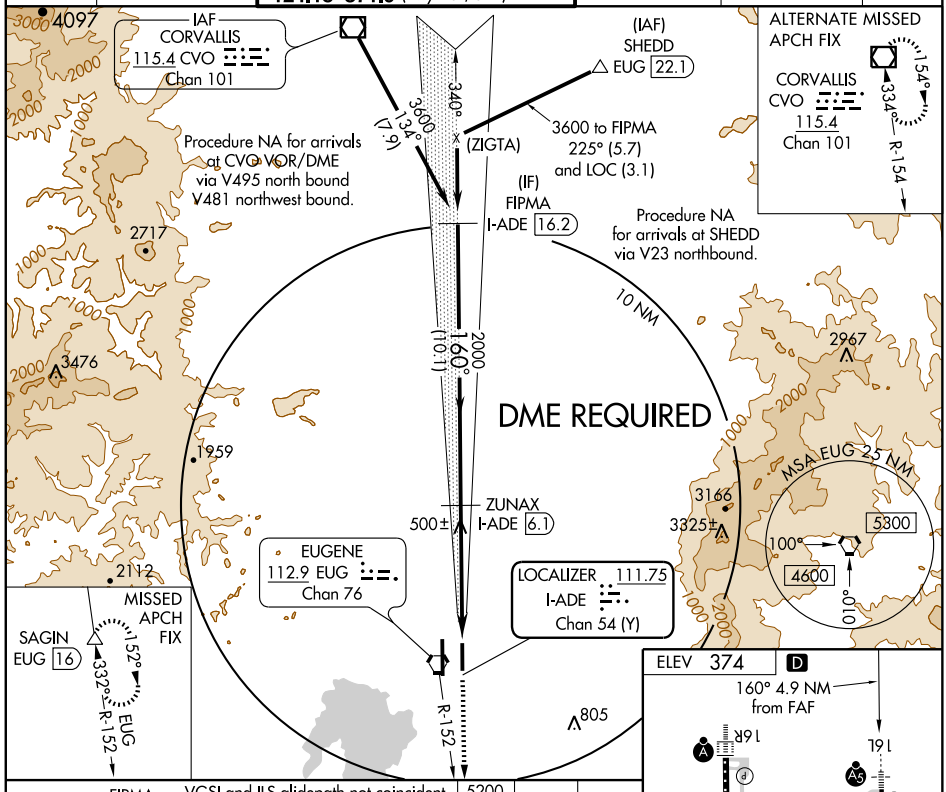
EUGENE/MAHLON SWEET FIELD (EUG)

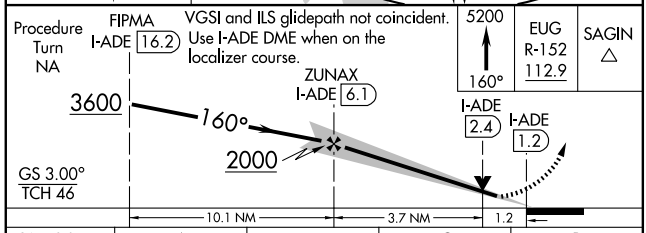
If local altimeter setting not received, use Corvallis altimeter setting and increase all DAs 70 feet, and all MDAs 80 feet. VDP NA when using Corvallis altimeter setting.

MALSR

MISSED APPROACH: Climb to 5200 via heading 160° and EUG VORTAC R-152 to SAGIN/EUG 16 DME and hold, continue climb-in-hold to 5200.

ATIS	CASCADE APP CON	EUGENE TOWER *	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95





CATEGORY	A	B	C	D
S-ILS 16L	569-½ 200 (200-½)			
S-LOC 16L	800-½ 431 (500-½)		800-¾ 431 (500-¾)	800-1 431 (500-1)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	160°	TDZE	364
Chan 38		Apt Elev	374

ILS or LOC/DME Z RWY 16R

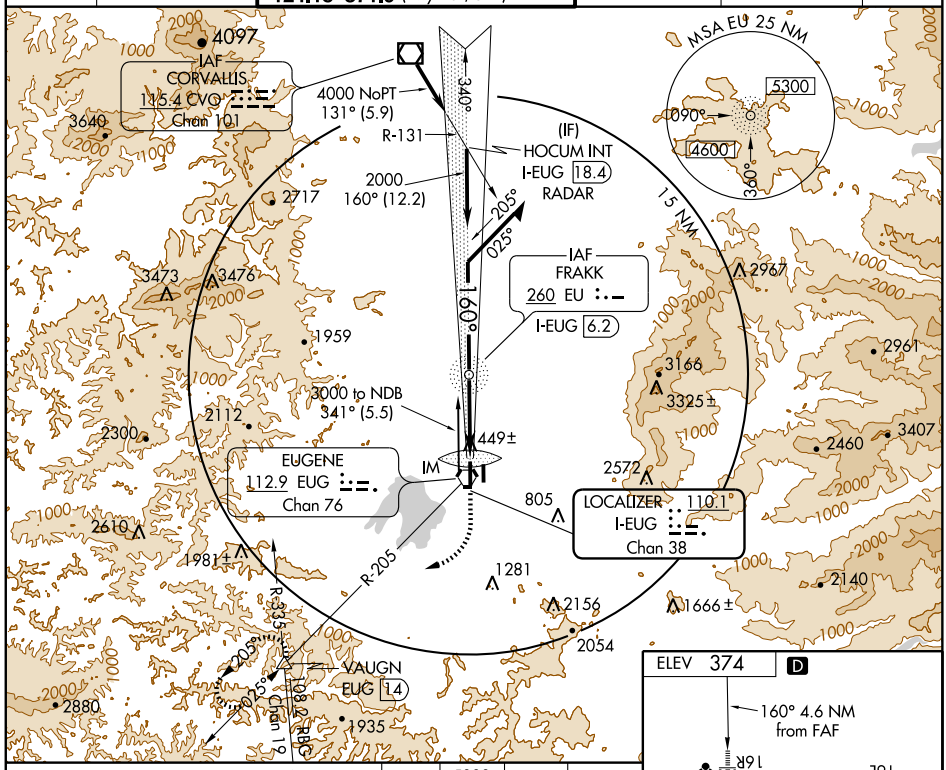
EUGENE/MAHLON SWEET FIELD (EUG)

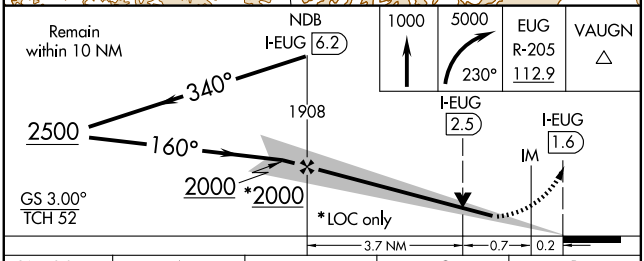
For inoperative ALSF-2: increase S-LOC 16R Cat D visibility to RVR 5000. DME required.

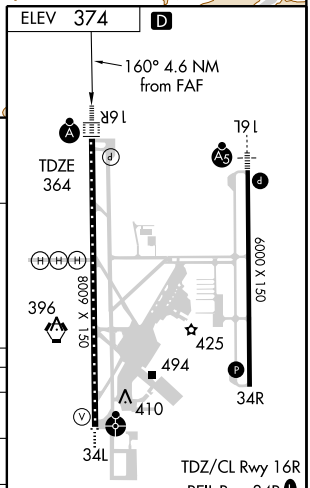
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 via heading 230° and EUG R-205 to VAUGN/ EUG 14 DME and hold, continue climb-in-hold to 5000.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
S-ILS 16R	564/18 200 (200-½)			
S-LOC 16R	700/24 336 (400-½)			700/40 336 (400-¾)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16L-34R and 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	160°	TDZE	364
Chan 38		Apt Elev	374

ILS or LOC Y RWY 16R

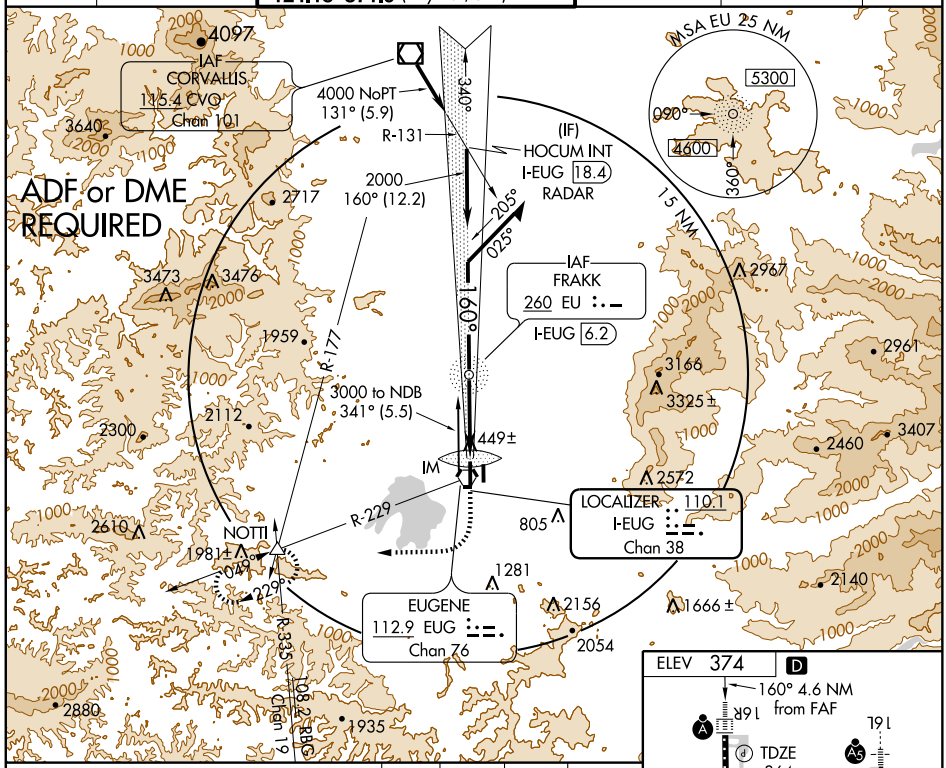
EUGENE/MAHLON SWEET FIELD (EUG)

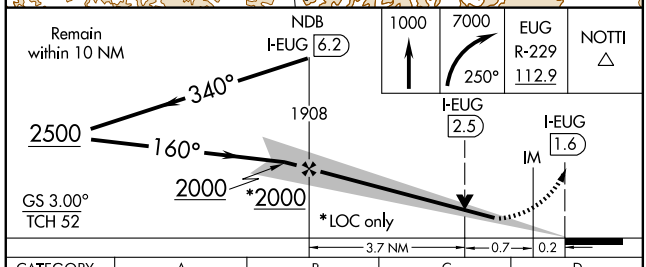
For inoperative ALSF-2: increase S-LOC 16R Cat D visibility to RVR 5000.

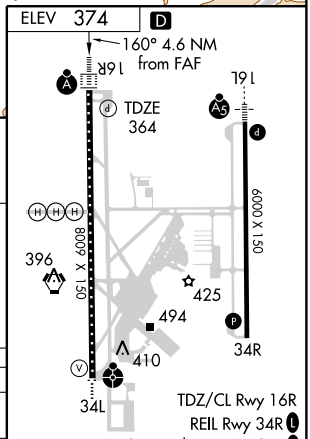
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 7000 via heading 250° and EUG R-229 to NOTTI INT and hold, continue climb-in-hold to 7000.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
S-ILS 16R	564/18 200 (200-½)			
S-LOC 16R	700/24 336 (400-½)			700/40 336 (400-¾)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	160°	TDZE	364
Chan 38		Apt Elev	374

ILS RWY 16R (CAT II)

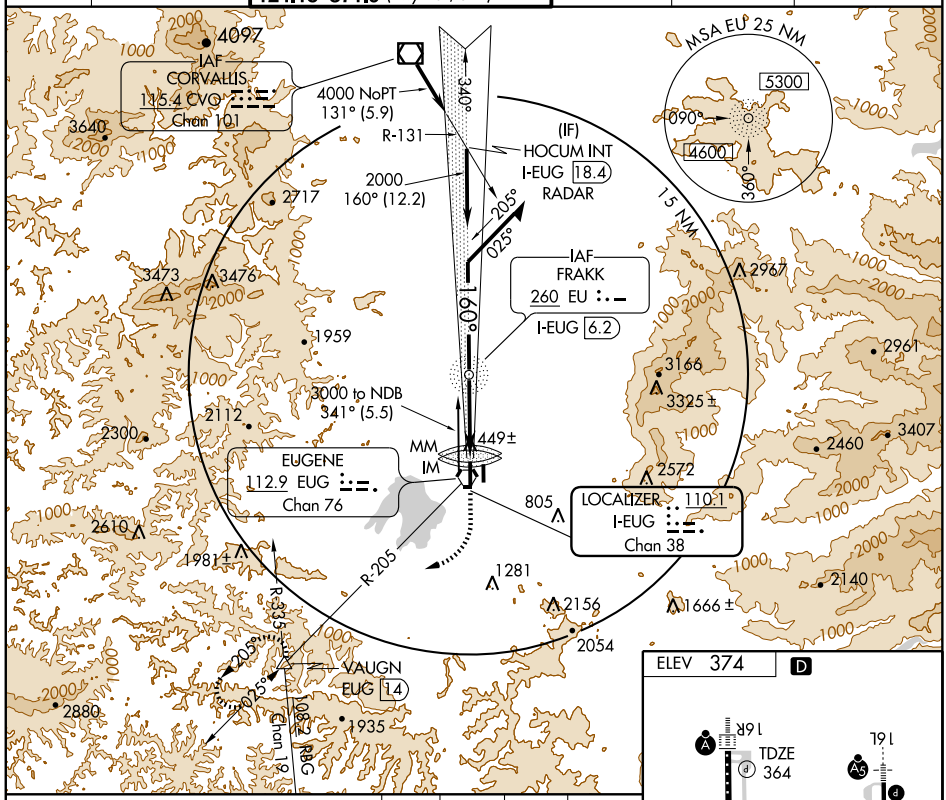
EUGENE/MAHLON SWEET FIELD (EUG)

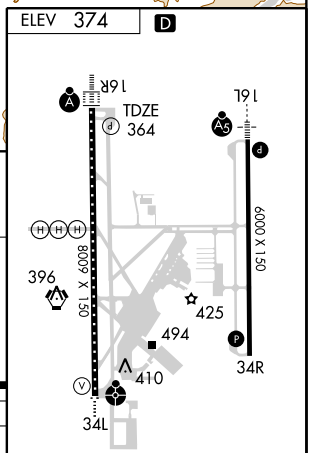
Cat II minimums not authorized when control tower closed.
DME required.

ALSF-2

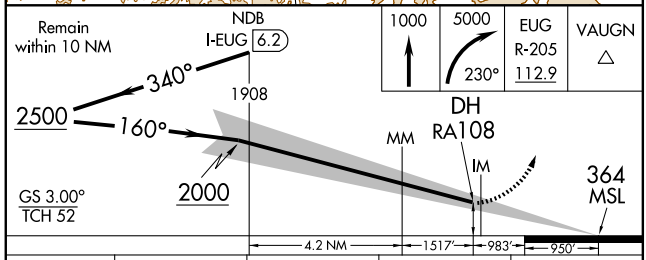
MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 via heading 230° and EUG R-205 to VAUGN/ EUG 14 DME and hold, continue climb-in-hold to 5000.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95





TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16L-34R and 16R-34L L



CATEGORY	A	B	C	D
S-ILS 16R	RA 108/12 100 DA 464			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	160°	TDZE	364
Chan 38		Apt Elev	374

ILS RWY 16R (CAT III)

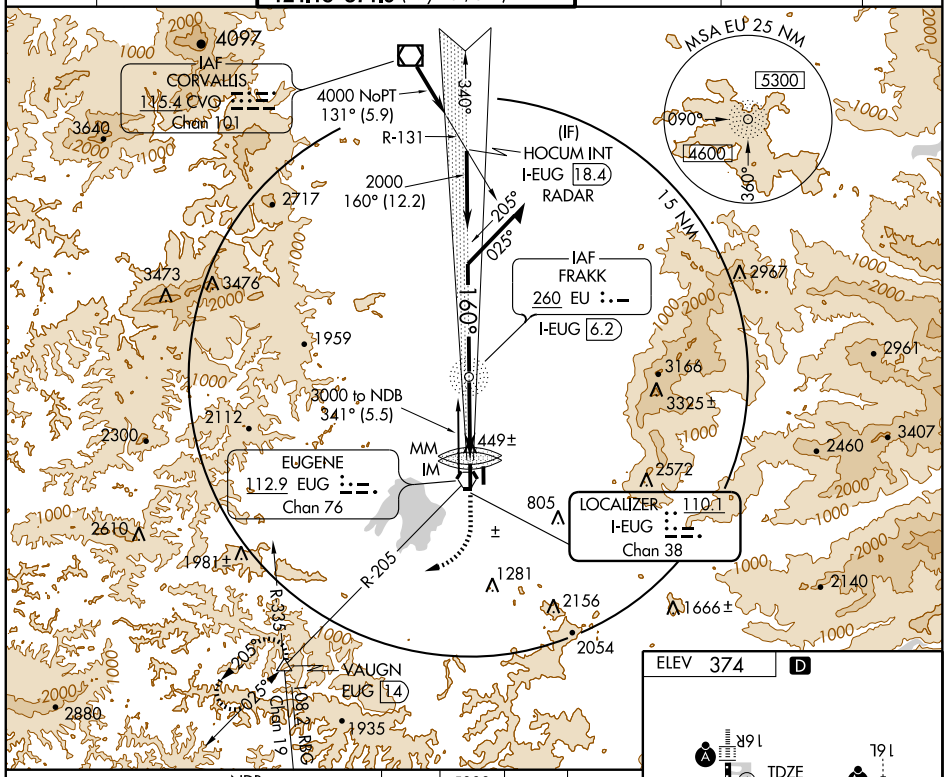
EUGENE/MAHLON SWEET FIELD (EUG)

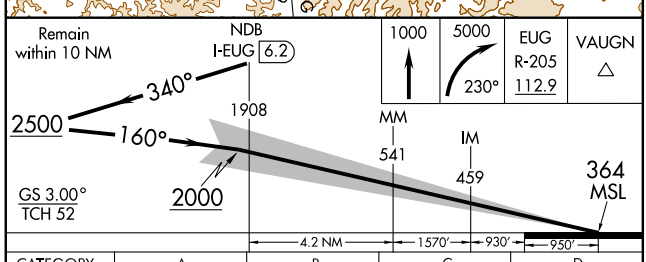
Cat III minimums not authorized when control tower closed.
DME required.

ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 via heading 230° and EUG R-205 to VAUGN/ EUG 14 DME and hold, continue climb-in-hold to 5000.

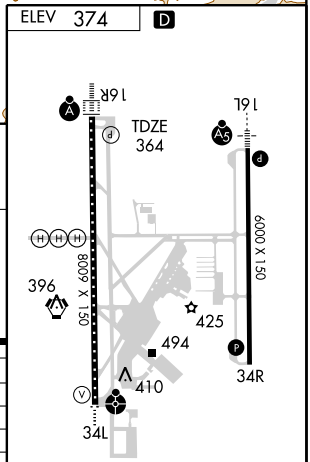
ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95





CATEGORY	A	B	C	D
S-ILS 16R	CAT IIIa	RVR 07		
S-ILS 16R	CAT IIIb	RVR 06		
S-ILS 16R	CAT IIIc	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16R-34L and 16L-34R L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	6000
CH 81827	160°	TDZE	369
W16A		Apt Elev	374

RNAV (GPS) RWY 16L

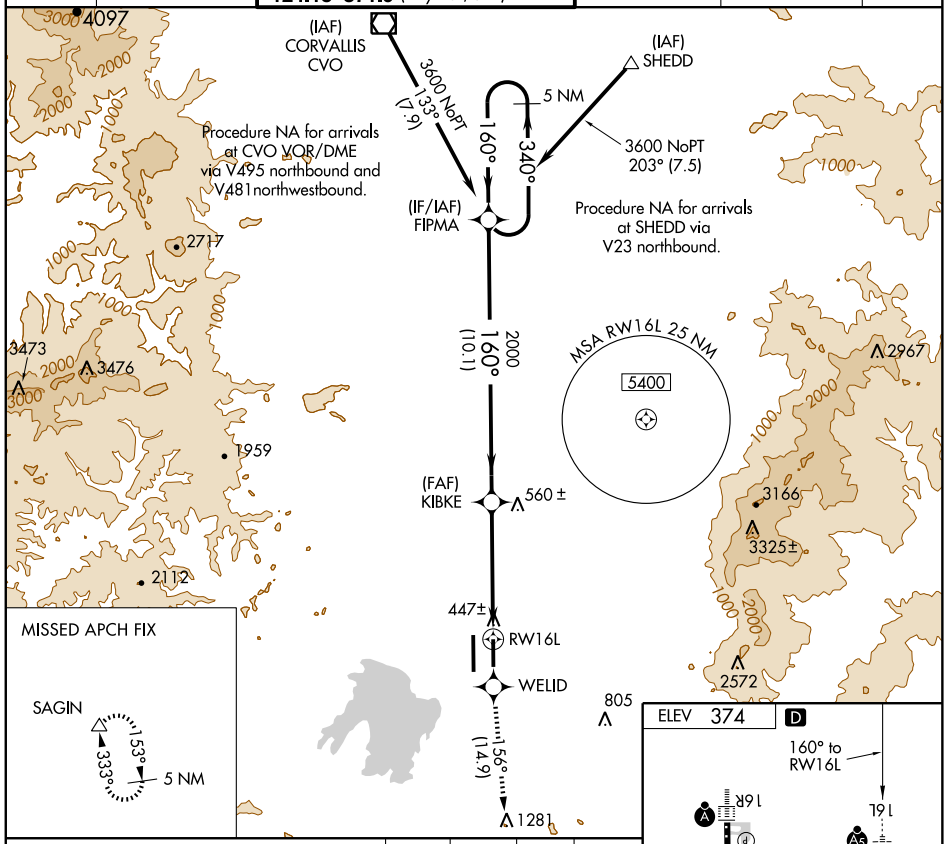
EUGENE/MAHLON SWEET FIELD (EUG)

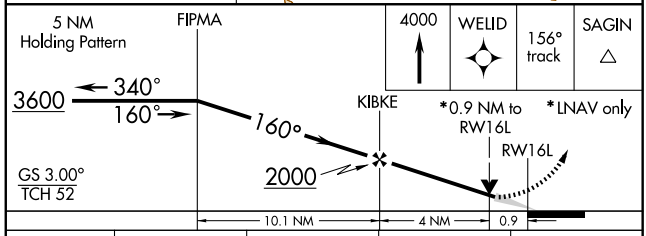
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).

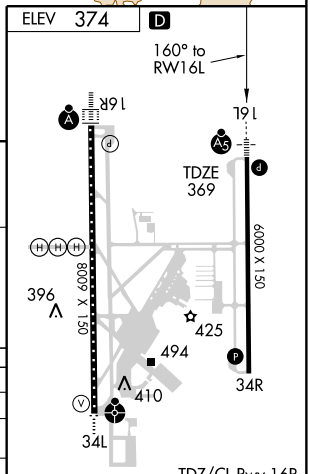
MALSR

MISSED APPROACH: Climb to 4000 direct WELID and via 156° track to SAGIN and hold, continue climb-in-hold to 4000.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
LPV DA	669-1 300 (300-1)			
LNAV/VNAV DA	715-1¼ 346 (400-1¼)			
LNAV MDA	700-1 331 (400-1)			
CIRCLING	800-1¼ 426 (500-1¼)	840-1¼ 466 (500-1¼)	840-1½ 466 (500-1½)	940-2 566 (600-2)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16L-34R and Rwy 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 45600 W34A	APP CRS 340°	Rwy Idg 8009 TDZE 367 Apt Elev 374

RNAV (GPS) RWY 34L

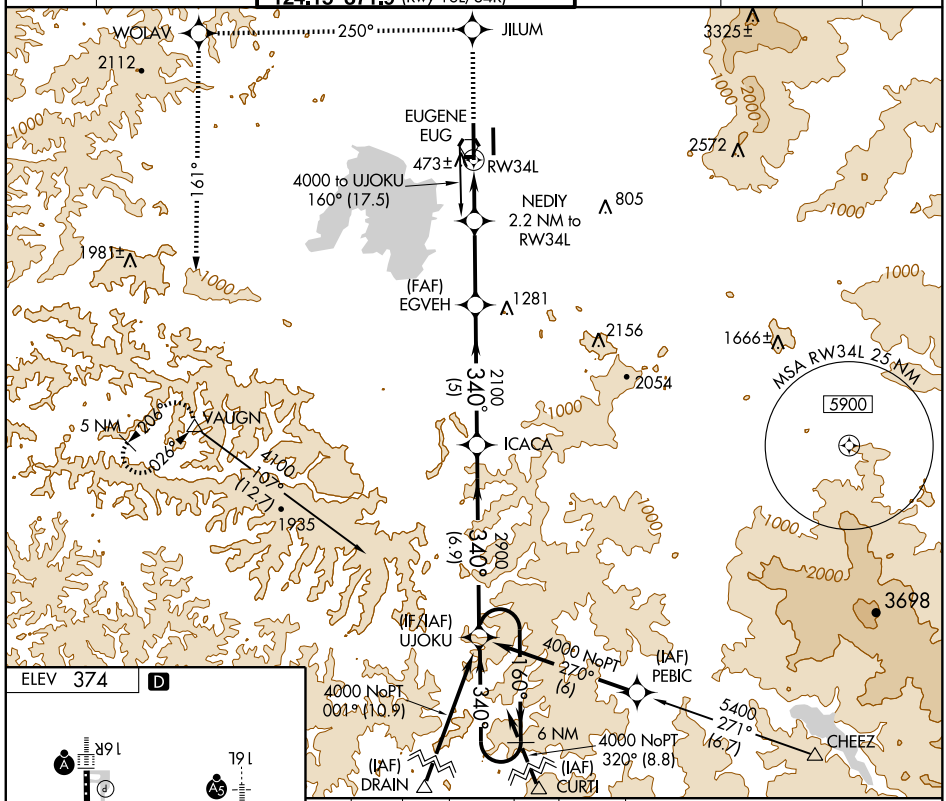
EUGENE/ MAHLON SWEET FIELD (EUG)

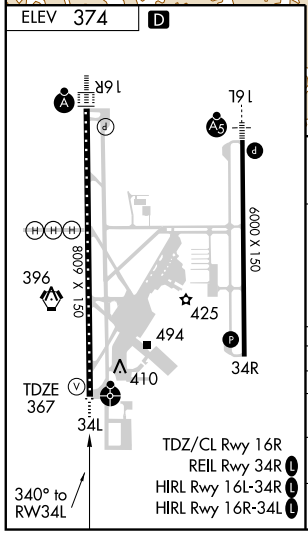
Inoperative table does not apply to LPV and LNAV/VNAV. Baro-VNAV NA below -15°C (5°F). DME/DME RNP-0.3 NA.

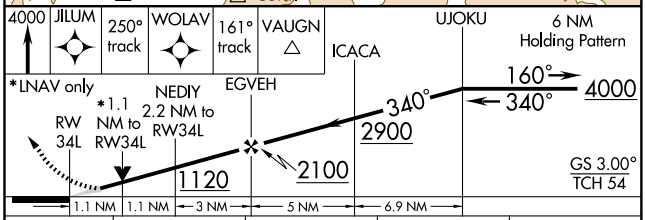
ODALS

MISSED APPROACH: Climb to 4000 direct JILUM and via 250° track to WOLAV and 161° track to VAUGN and hold.

ATIS	CASCADE APP CON	EUGENE TOWER★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
LPV DA	617/40 250 (300-¾)			
LNAV/VNAV DA	744/60 377 (400-1¼)			
LNAV MDA	760/40 393 (400-¾)			760/60 393 (400-1¼)
CIRCLING	800-1¼ 426 (500-1¼)	840-1¼ 466 (500-1¼)	840-1½ 466 (500-1½)	940-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 81900 W34B	APP CRS 340°	Rwy Idg 6000 TDZE 374 Apt Elev 374

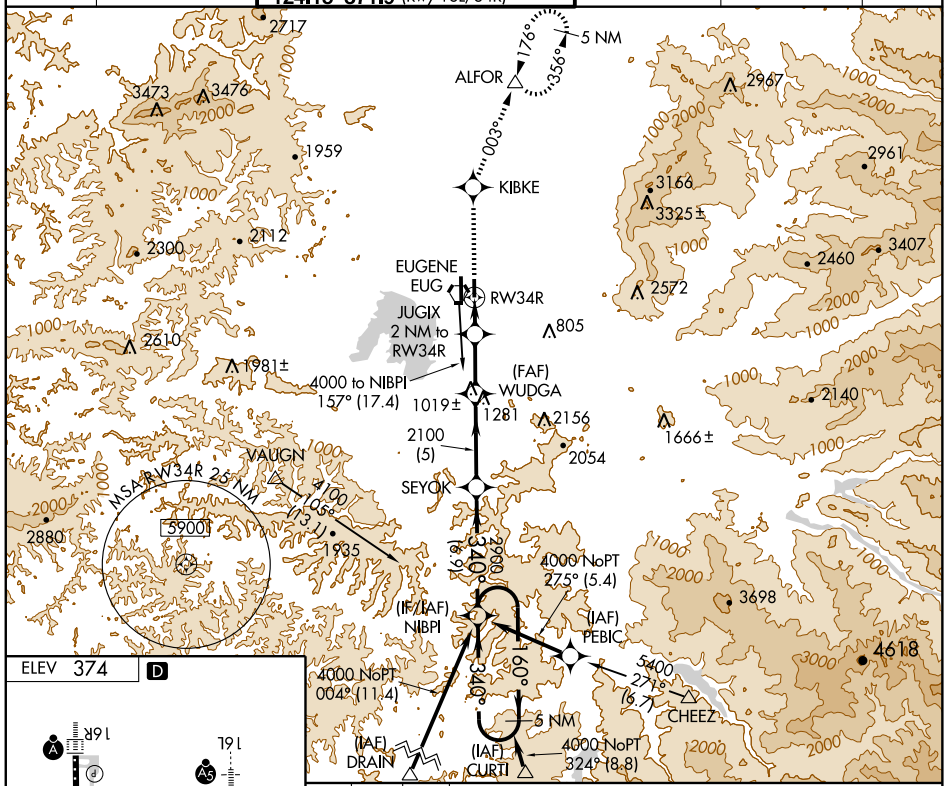
RNAV (GPS) RWY 34R

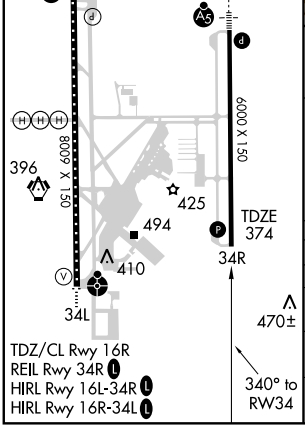
EUGENE/ MAHLON SWEET FIELD (EUG)

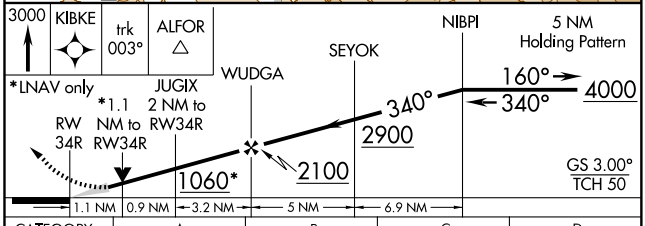
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct KIBKE and via track 003° to ALFOR and hold.

ATIS	CASCADE APP CON	EUGENE TOWER *	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
LPV DA	658-1 284 (300-1)			
LNAV/ VNAV DA	796-1½ 422 (500-1½)			
LNAV MDA	760-1 386 (400-1)			760-1¼ 386 (400-1¼)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

EUGENE, OREGON

AL-140 (FAA)

VORTAC EUG	APP CRS	Rwy Idg	8009
112.9	168°	TDZE	363
Chan 76		Apt Elev	374

VOR/DME or TACAN RWY 16R

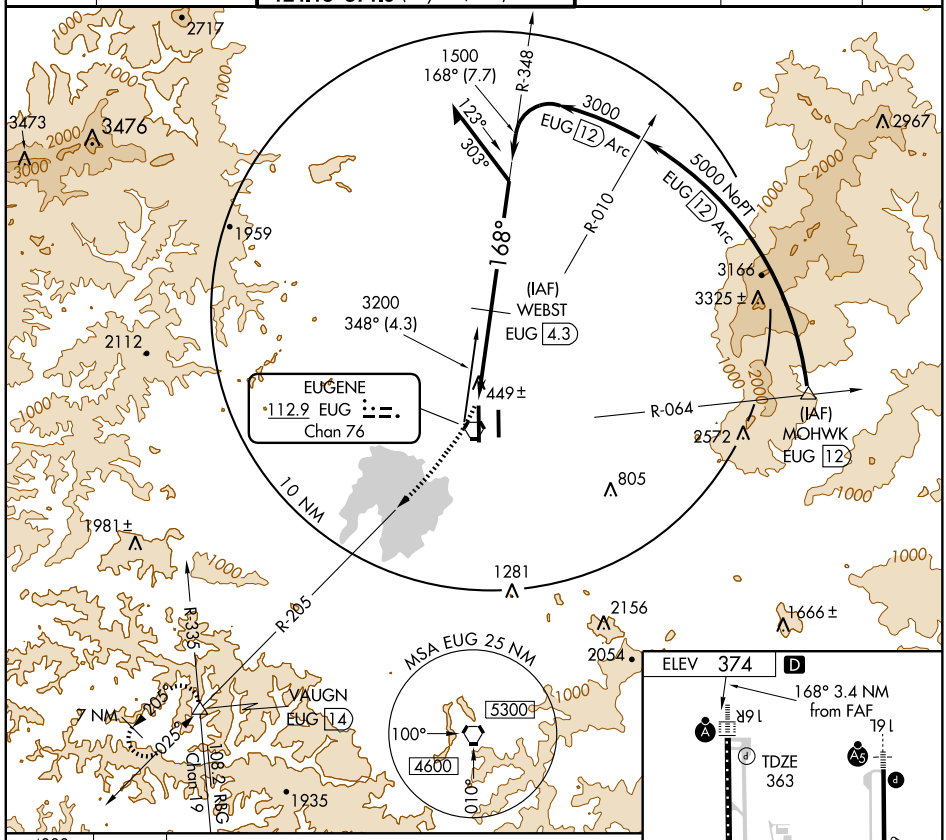
EUGENE/MAHLON SWEET FIELD (EUG)

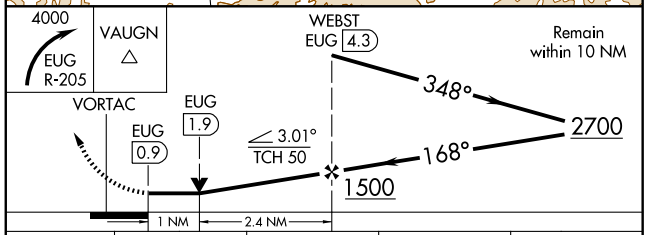
For inoperative MALSR, increase S-16R Cat D visibility to RVR 6000.

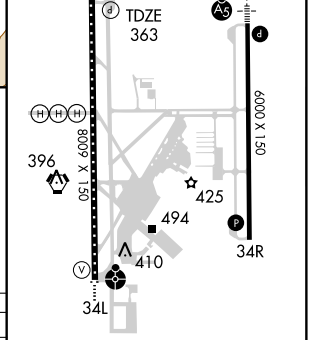
ALSF-2

MISSED APPROACH: Climbing right turn to 4000 via EUG R-205 to VAUGN/14 DME and hold.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
S-16R	720/24 357 (400-½)			720/50 357 (400-1)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

TDZ/CL Rwy 16R

REIL Rwy 34R L

HIRL Rwy 16L-34R and Rwy 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

EUGENE, OREGON

AL-140 (FAA)

VORTAC EUG	APP CRS	Rwy Idg	8009
112.9	332°	TDZE	367
Chan 76		Apt Elev	374

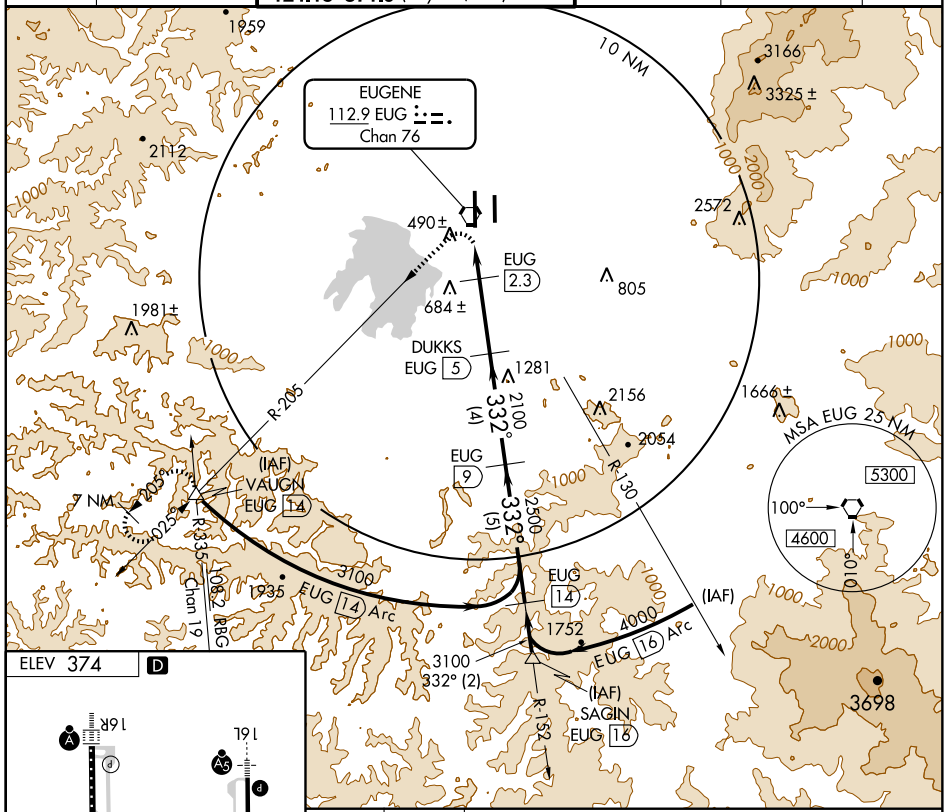
VOR/DME or TACAN RWY 34L

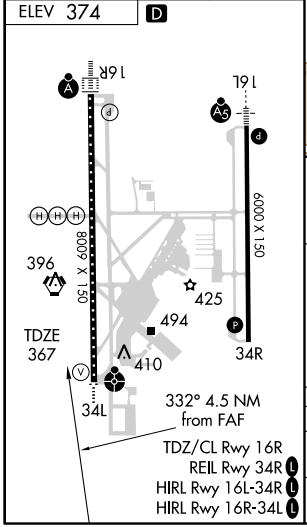
EUGENE/MAHLON SWEET FIELD (EUG)

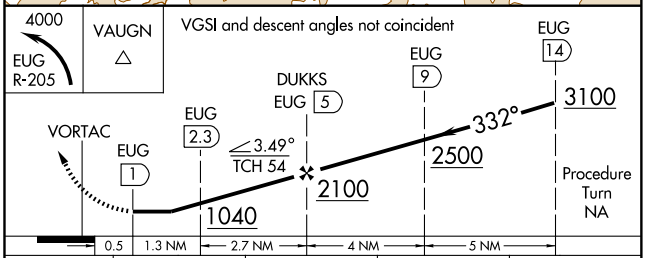
ODALS

MISSED APPROACH: Climbing left turn to 4000 via EUG R-205 to VAUGN/14 DME and hold.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) Ⓛ 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95







CATEGORY	A	B	C	D
S-34L	760/40 393 (400-¾)			760/60 393 (400-1¼)
CIRCLING	800-1 426 (500-1)	840-1 466 (500-1)	840-1½ 466 (500-1½)	940-2 566 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC EUG 112.9 Chan 76	APP CRS 168°	Rwy Idg N/A TDZE N/A Apt Elev 369

VOR or GPS-A

EUGENE/MAHLON SWEET FIELD (EUG)

MISSED APPROACH: Climbing right turn to 4000 via EUG R-204, then direct EUG VORTAC and hold.

ATIS	CASCADE APP CON	EUGENE TOWER ★	GND CON	CLNC DEL	UNICOM
125.225	119.6 348.7	118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95

MSA EUG 25 NM
5300
100°
4600
010°
R-348
123°
303°
168°
(EYMAN)
IAF
EUGENE
112.9 EUG
Chan 76
024°
204°
R-204
10 NM
2717
3473
3476
1959
2112
1981 ±
1935
1752
2967
3166
3325 ±
2572
1465 ±
805
1281
2156
2054
1666 ±

ELEV 369 D
168° to VORTAC
19 l
19 l
6000 X 150
6009 X 150
396
425
494
410
34R
34L

4000 EUG R-204	EUG 112.9

VORTAC
348°
(EYMAN)
2700
168°
4 NM
Remain within 10 NM

CATEGORY	A	B	C	D
CIRCLING	1200-1 831 (900-1)	1200-1¼ 831 (900-1¼)	1200-2½ 831 (900-2½)	1200-2¾ 831 (900-2¾)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwy 16L-34R and Rwy 16R-34L L

NW-1, 14 JAN 2010 to 11 FEB 2010

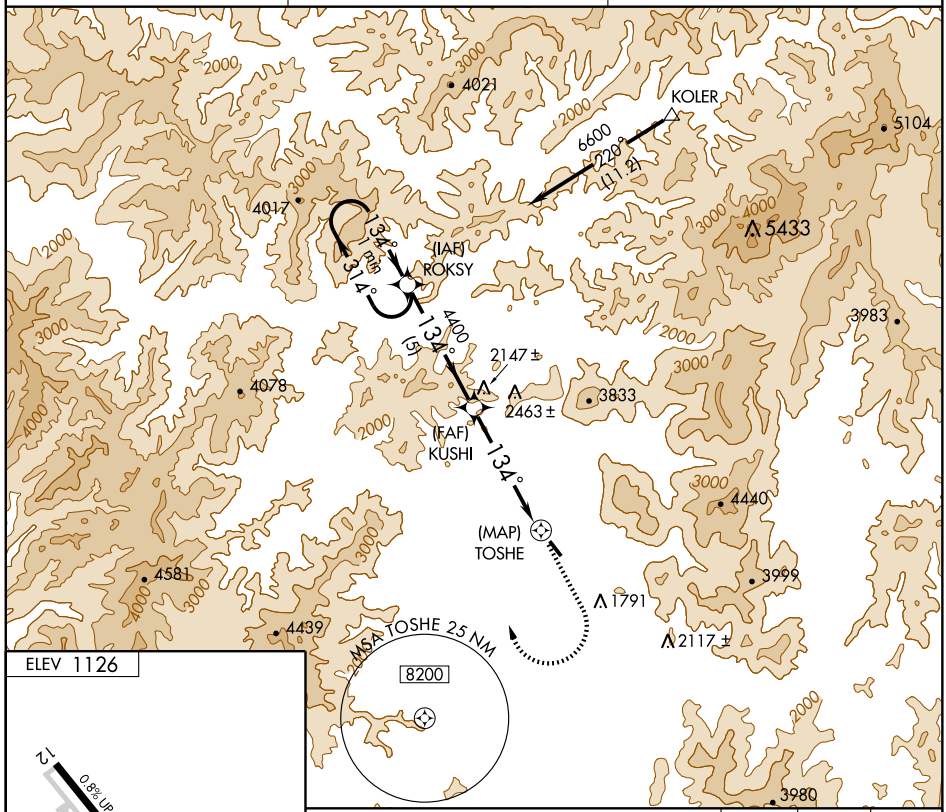
APP CRS	Rwy Idg	N/A
134°	TDZE	N/A
	Apt Elev	1126

GPS-A
GRANTS PASS (3S8)

T
NA
Obtain local altimeter on CTAF; when not received procedure not authorized.
Circling not authorized northeast of Rwy 12-30.

MISSED APPROACH: Climb to 4000, then climbing right turn to 5200 direct ROKSY WP and hold.

AWOS-2	CASCADE APP CON ★	UNICOM
122.8	124.3 379.9	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	2600-1¼ 1474 (1500-1¼)	2600-1½ 1474 (1500-1½)	NA	

REIL Rwys 12 and 30 L
MIRL Rwy 12-30

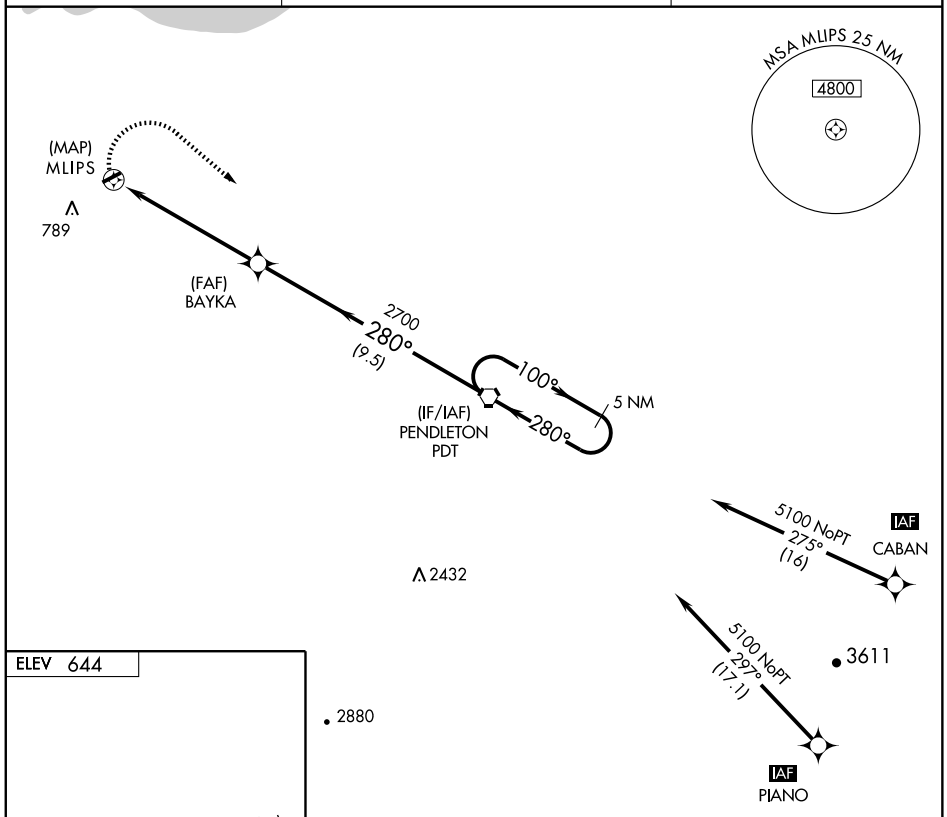
APP CRS	Rwy Idg	N/A
280°	TDZE	N/A
	Apt Elev	644

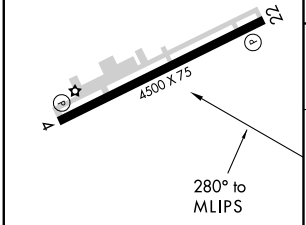
RNAV(GPS)-B
HERMISTON MUNI (HRI)

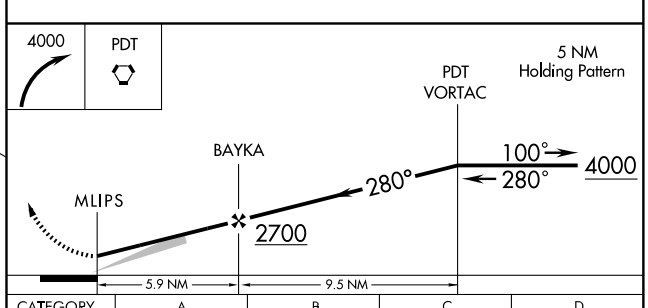
T GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA.
NA IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climbing right turn to 4000 direct PDT VORTAC and hold.

ASOS	CHINOOK APP CON *	UNICOM
135.225	133.15 379.15	122.8 (CTAF) L







REIL Rwy 22 L
MIRL Rwy 4-22 L

CATEGORY	A	B	C	D
CIRCLING	1180-1 536 (600-1)		1180-1½ 536 (600-1½)	1200-2 556 (600-2)

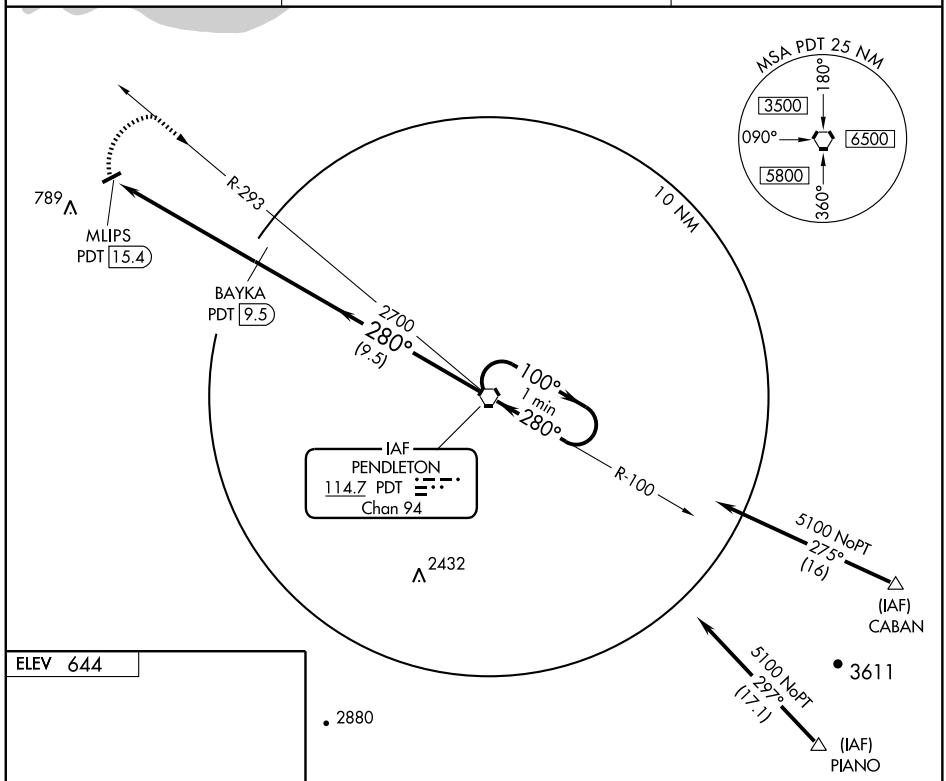
NW-1, 14 JAN 2010 to 11 FEB 2010

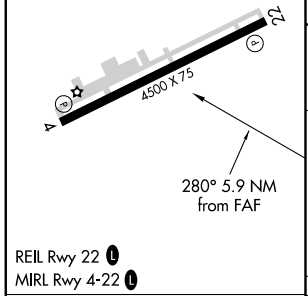
VORTAC PDT	APP CRS	Rwy Idg	N/A
114.7	280°	TDZE	N/A
Chan 94		Apt Elev	644

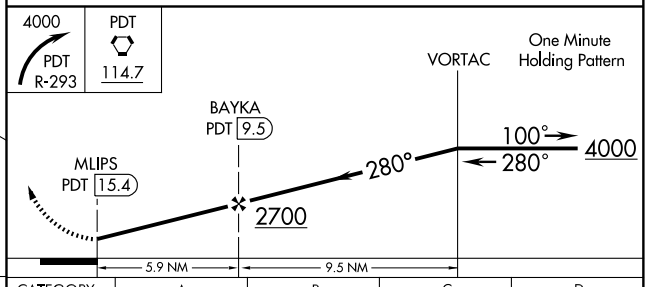
VOR/DME-A
HERMISTON MUNI (HRI)

MISSED APPROACH: Climbing right turn to 4000 via PDT R-293 to PDT VORTAC and hold.

ASOS	CHINOOK APP CON ★	UNICOM
135.225	133.15 379.15	122.8 (CTAF) L







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	1180-1 536 (600-1)		1180-1½ 536 (600-1½)	1200-2 556 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4471
083°	TDZE	3669
	Apt Elev	3703

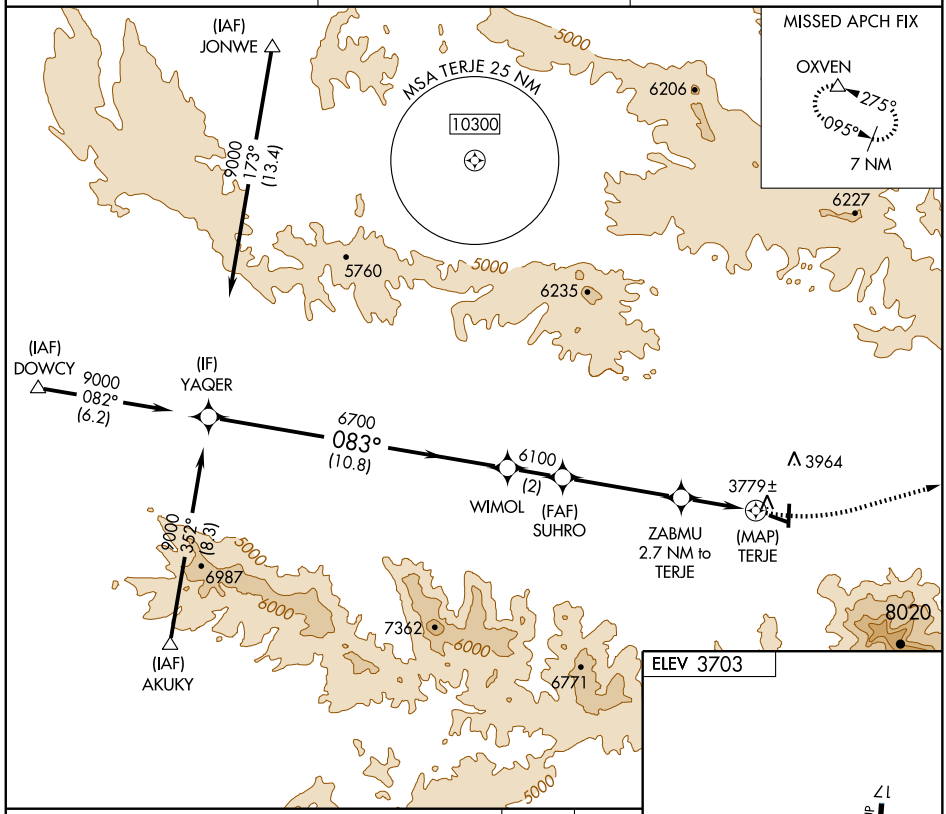
RNAV (GPS) Y RWY 9

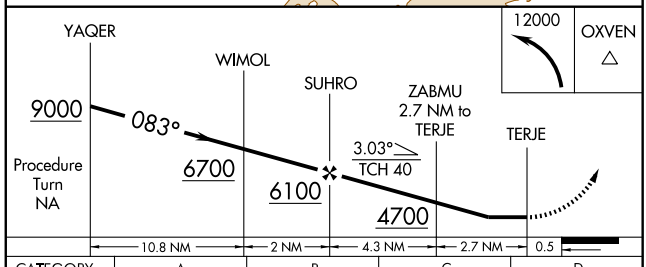
JOHN DAY / GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

When local altimeter setting not received, procedure NA.
Circling NA south of Rwy 9-27. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

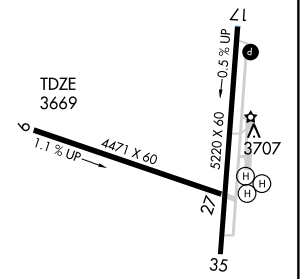
MISSED APPROACH: Climbing left turn to 12000 direct OXVEN and hold, continue climb-in-hold to 12000.

AWOS-3	SEATTLE CENTER	UNICOM
118.375	128.15 257.75	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	4280-1 611 (600-1)		4280-1¾ 611 (600-1¾)	NA
CIRCLING	4280-1 577 (600-1)	4520-1¼ 817 (900-1¼)	4520-2½ 817 (900-2½)	NA



REIL Rwy 17 L
MIRL Rwy 17-35 L
LIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	4471
CH 73010	091°	TDZE	3669
W09A		Apt Elev	3703

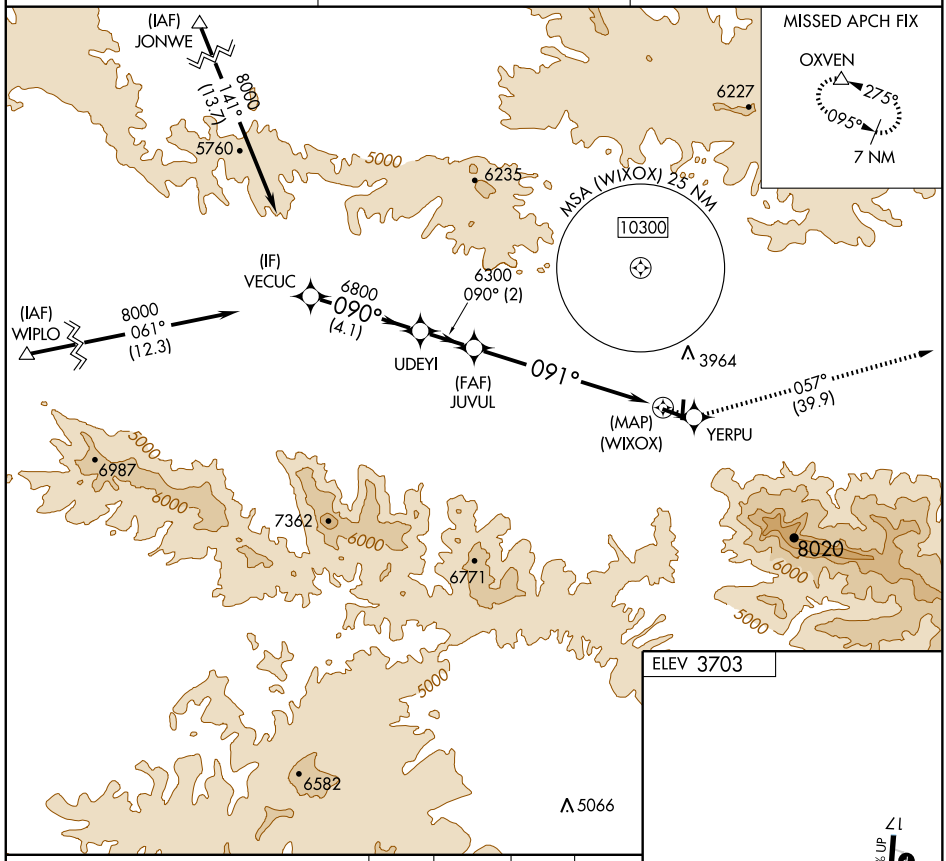
RNAV (GPS) Z RWY 9

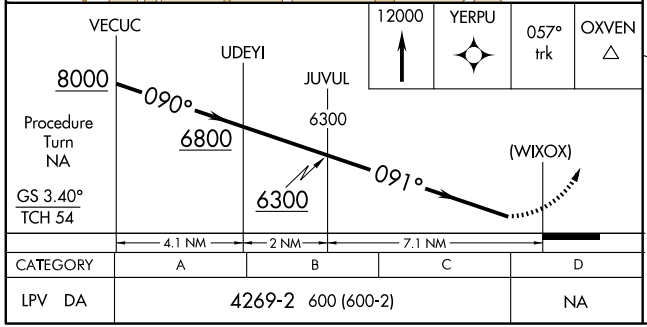
JOHN DAY/ GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

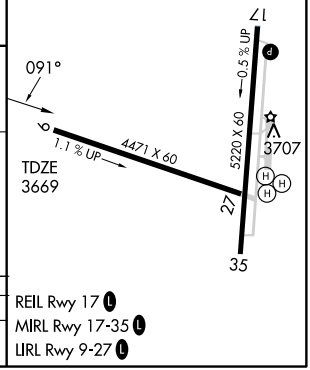
When local altimeter setting not received, procedure NA.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 12000 direct YERPU then via 057° track to OXVEN and hold, continue climb-in-hold to 12000.

AWOS-3	SEATTLE CENTER	UNICOM
118.375	128.15 257.75	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	4269-2 600 (600-2)			NA

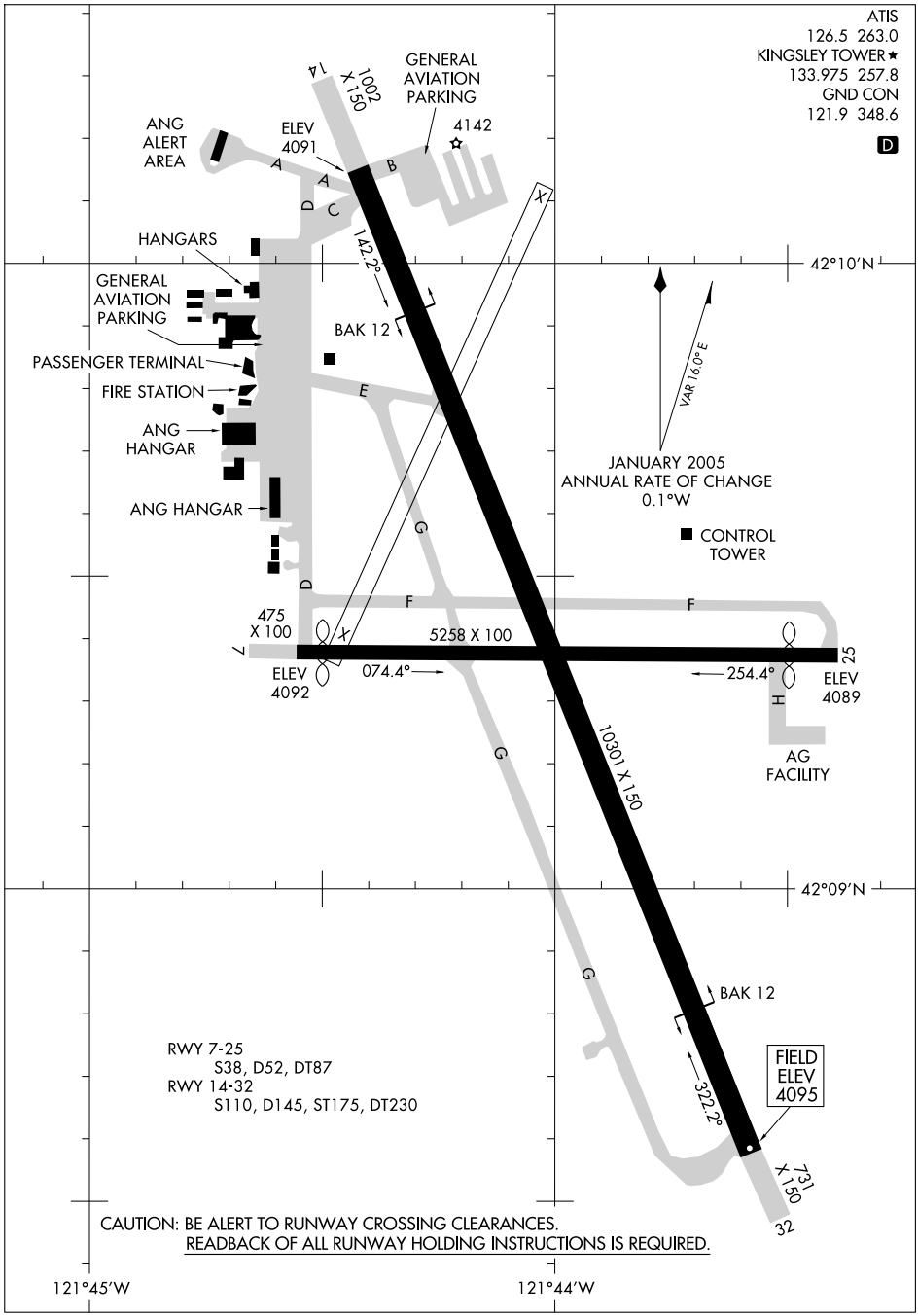
REIL Rwy 17 L
MIRL Rwy 17-35 L
LIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-473 (FAA)

KLAMATH FALLS (LMT)
KLAMATH FALLS, OREGON



NW-1, 14 JAN 2010 to 11 FEB 2010

HI-ILS/DME 2 RWY 32

LOC I-LMT	APCH CRS	Rwy ldg / TDZE / Arpt Elev	JAL-473 [USAF]	KLAMATH FALLS (KINGSLEY FIELD) (KLMT)
109.5	321°	10,301 / 4092 / 4095		

MALSR

MISSED APPROACH: Climb to 5300 heading 307° then climbing left turn to 11,000 via heading 220° to intercept LMT VORTAC R-250 to HINRY/16 DME and hold.

ATIS ★	KINGSLEY APP CON	KINGSLEY TOWER ★	GND CON	ASOS
126.5 263.0	123.675 270.8	133.975 CTAF 257.8	121.9 348.6	

Simultaneous reception of I-LMT and LMT DME required

High terrain all quadrants

ROGUE VALLEY

FL200 109° (84)

LOCALIZER 109.5 I-LMT

KLAMATH FALLS 115.9 LMT Chan106

HINRY LMT 16

R-250 250° 070°

LMT 4

MELTT LMT 6.4

OM

LMT 9

LMT 14

LMT 20

LR-135

R-120

10,000

11,000

LMT 20

(IAF) YANEX LMT 20

FL200

052° 232°

R-052

LAKEVIEW

FL200 200° (68)

(IAF) PEREZ LMT 35 FL200

LMT 35

MSA LMT 25 NM 9300

LMT 50

R-142

322° 142°

321° 141°

20 NM

HIGH ALTITUDE FACILITIES

8208 7260 6198 4861 4606 6602 5045 6596 6255

CAUTION:
Descent below 7600 not authorized unless localizer is received.

EMERG SAFE ALT 100 NM 16,200

ELEV 4095

4169± 4142 4173 4143± 4122± 10-301 x 150 5258 x 100 7 25 P

Rwy 7 ldg 4953'
Rwy 25 ldg 4746'

TDZE 4092

REIL Rwy 25
HIRL Rwy 7-25 and 14-32

321° 5.8 NM from OM

32 4182±

5300 hdg 307°	11,000 hdg 220°	HINRY LMT R-250 16

MELTT OM 6.4 9 4 6038 VORTAC 0.6

Intcp Lczr 14 R-142 20

322° 321° 10,000 7600 7100 6600 LOC 6100 LOC 5200 LOC

GS 3.00° TCH 55

3.4 NM 2.4 NM

CATEGORY	C	D	E
S-ILS 32	4292/24	200	(200-½)
S-LOC 32	4500/40	408 (500-¾)	4500/50 408 (500-1)

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 14

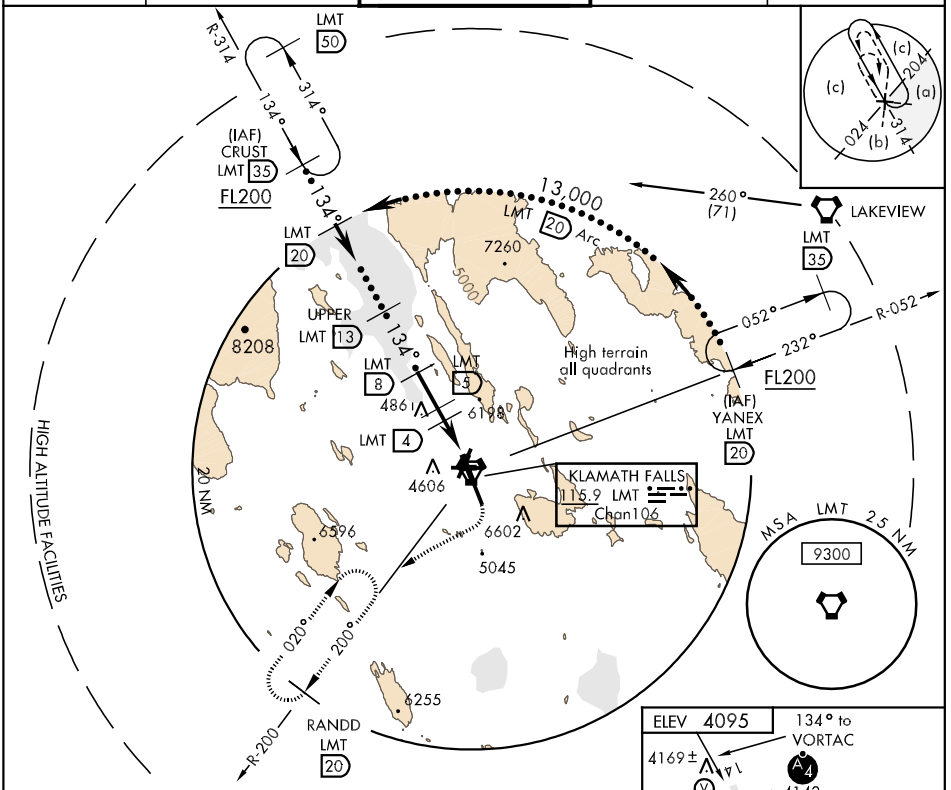
VORTAC LMT 115.9 Chan 106	APCH CRS 134°	Rwy ldg 10,301 TDZE 4088 Arpt Elev 4095

JAL-473 [USAF] KLAMATH FALLS (KINGSLEY FIELD) (KLMT)

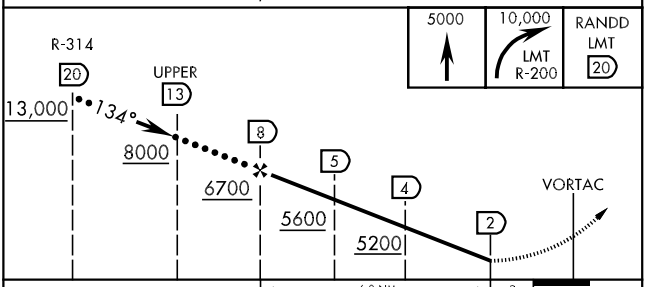
MALSF

MISSED APPROACH: Climb straight ahead to 5000 then climbing right turn to 10,000 via LMT VORTAC R-200 to RANDD and hold.

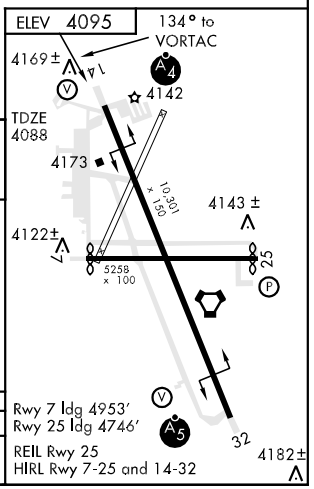
ATIS ★	KINGSLEY APP CON	KINGSLEY TOWER ★	GND CON	ASOS
126.5 263.0	123.675 270.8	133.975 CTAF 257.8	121.9 348.6	



EMERG SAFE ALT 100 NM 16,200



CATEGORY	C	D	E
S-14	4680-1½ 592 (600-1½)	4680-1¾ 592 (600-1¾)	



NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 32

VORTAC LMT	APCH CRS	Rwy ldg	10,301
115.9	328°	TDZE	4095
Chan 106		Arpt Elev	4095

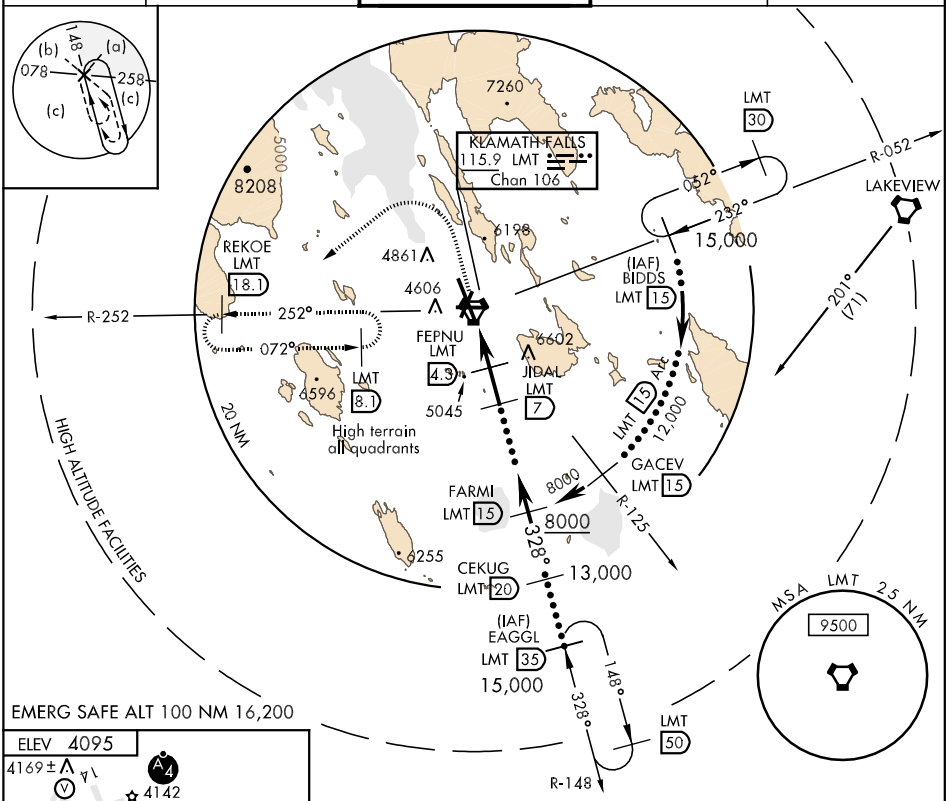
JAL-473 [USAF] KLAMATH FALLS (KINGSLEY FIELD) (KLMT)

When ALS inop, increase CAT CDE vis ¼ mile.

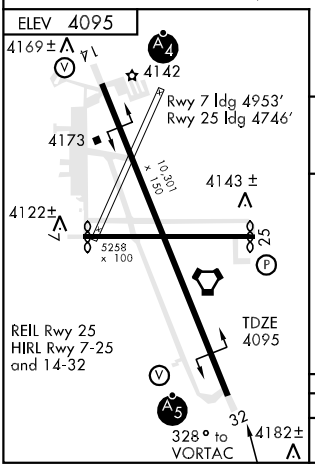
MALSR A5

MISSED APPROACH: Climb to 5000 then climbing left turn to 10,000 to intercept LMT VORTAC R-252 to REKOE/LMT 8.1 DME and hold, continue climb in hold to 10,000.

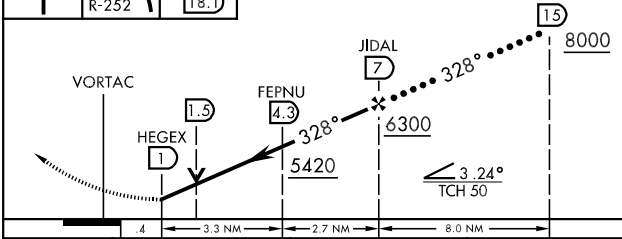
ATIS ★	KINGSLEY APP CON	KINGSLEY TOWER ★	GND CON	ASOS
126.5 263.0	123.675 270.8	133.975 CTAF 257.8	121.9 348.6	



EMERG SAFE ALT 100 NM 16,200



5000	10,000 LMT R-252	REKOE LMT 18.1	VGSI and descent angle not coincident	Procedure turn NA



CATEGORY	C	D	E
S-32	4440/40 345 (400-¾)	4440/50 345 (400-1)	

KLAMATH FALLS, OREGON

AL-473 (FAA)

LOC I-LMT	APP CRS	Rwy Idg 10301 TDZE 4092 Apt Elev 4092
109.5	321°	

ILS or LOC RWY 32

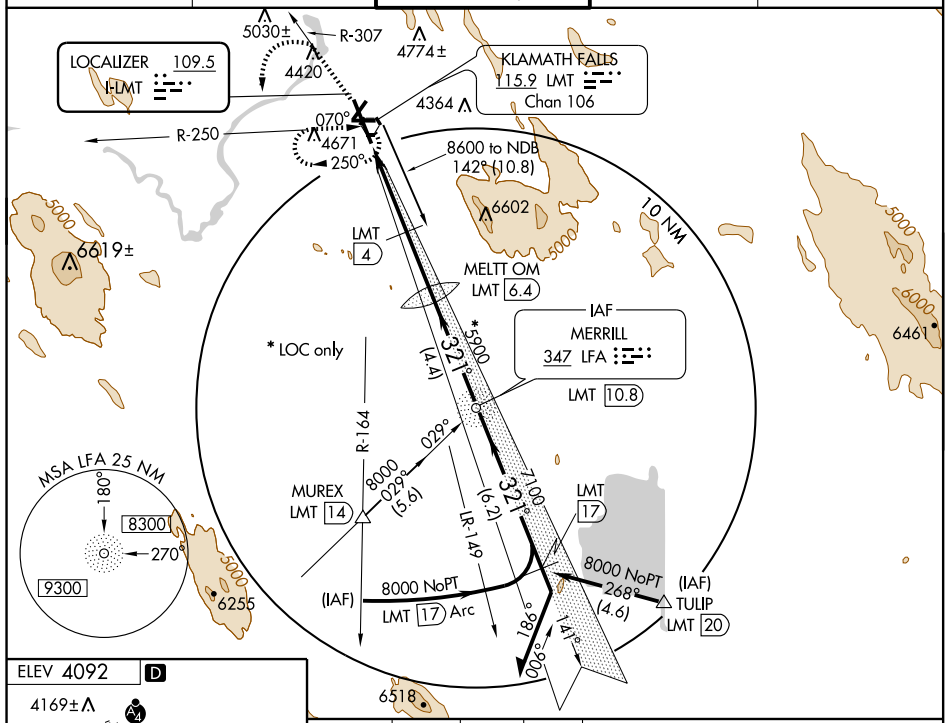
KLAMATH FALLS (LMT)

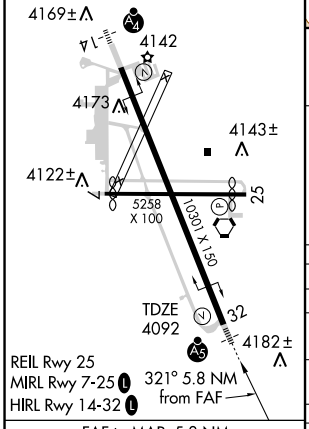
ASR/PAR

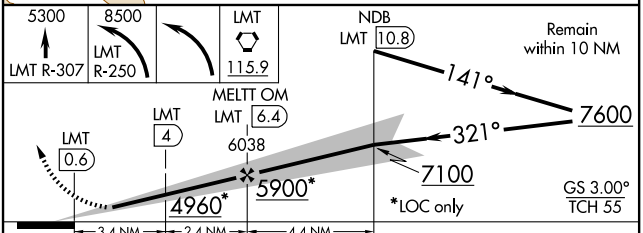
MALSR

MISSED APPROACH: Climb to 5300 via LMT R-307 then climbing left turn westbound to 8500 via LMT R-250, then left turn direct LMT VORTAC and hold.

ATIS	KINGSLEY APP CON *	KINGSLEY TOWER *	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95







CATEGORY	A	B	C	D
S-ILS 32	4292/24 200 (200-½)			
S-LOC 32	4960/24 868 (900-½)	4960/40 868 (900-¾)	4960-2 868 (900-2)	4960-2¼ 868 (900-2¼)
CIRCLING	4960-1 868 (900-1)	4980-1¼ 888 (900-1¼)	4980-2¾ 888 (900-2¾)	5000-3 908 (1000-3)
	DME MINIMUMS			
S-LOC 32	4500/24 408 (500-½)		4500/40	408 (500-¾)
CIRCLING	4840-1 748 (800-1)	4980-1¼ 888 (900-1¼)	4980-2¾ 888 (900-2¾)	5000-3 908 (1000-3)

FAF to MAP 5.8 NM

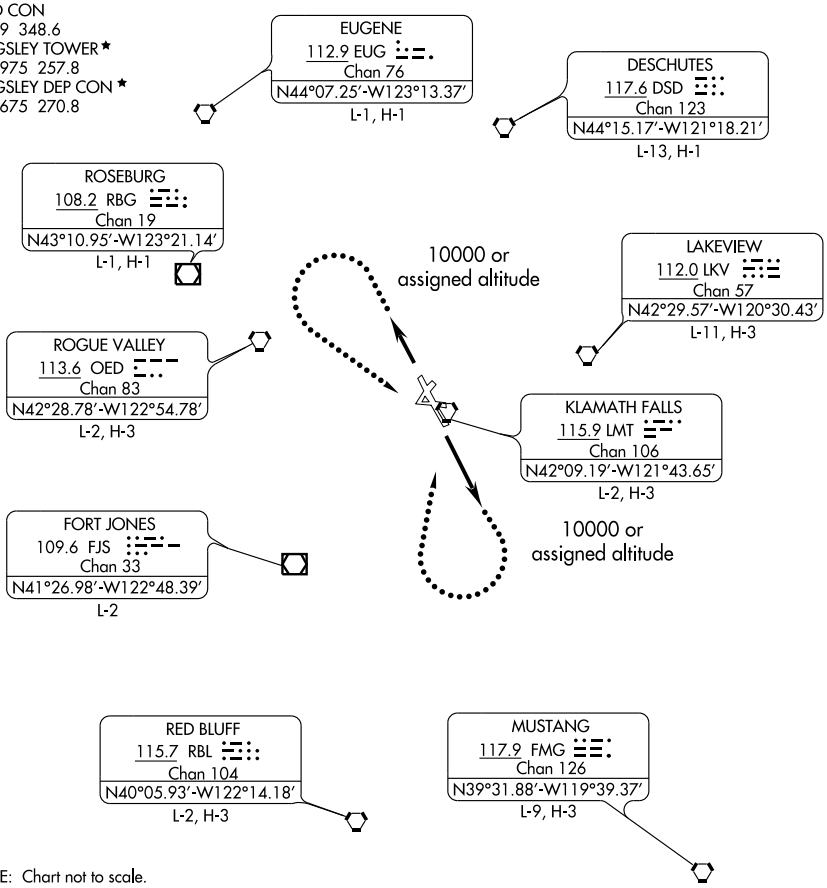
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NW-1, 14 JAN 2010 to 11 FEB 2010

KINGSLEY THREE DEPARTURE

SL-473 (FAA)

ATIS
126.5 263.0
GND CON
121.9 348.6
KINGSLEY TOWER ★
133.975 257.8
KINGSLEY DEP CON ★
123.675 270.8



NOTE: Chart not to scale.

NOTE: This SID requires a minimum climb of 325′ per NM to 8500′ or 4500′ ceiling and 3 mile visibility to clear obstruction. (813 FPM at 150K,1083 FPM 200K, 1354 FPM at 250K).

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 14 and 32: Climb via runway heading until leaving 4700′. Then via radar vector headings to assigned route.

LOST COMMUNICATIONS

If not in contact with Seattle Center after reaching 10000′ or assigned altitude, if lower; continue climb to assigned altitude and:

Take-off runway 14: Climbing right turn direct LMT VORTAC, thence via (assigned route).

Take-off runway 32: Climbing left turn direct LMT VORTAC, thence via (assigned route).

WAAS	APP CRS	Rwy Idg	10301
CH 58001	141°	TDZE	4091
W14A		Apt Elev	4095

RNAV (GPS) RWY 14

KLAMATH FALLS (LMT)

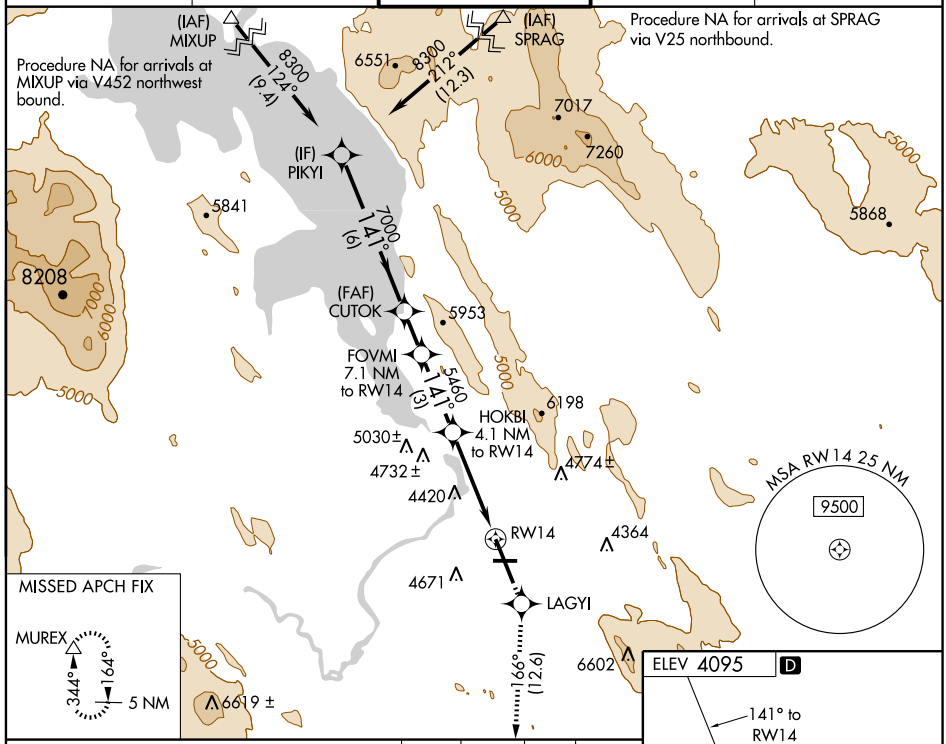
T
A
ASR/PAR

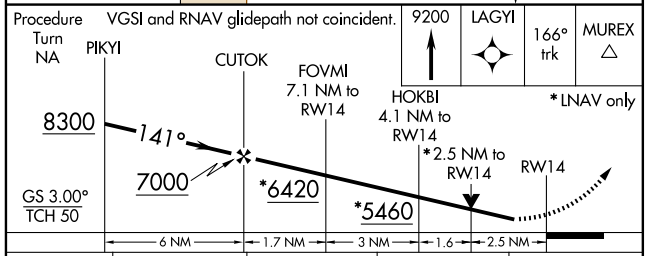
DME/DME RNP-0.3 NA.
Inoperative table does not apply to LPV all Cats, and LNAV Cats B, C and D.
Visibility reduction by helicopters NA.

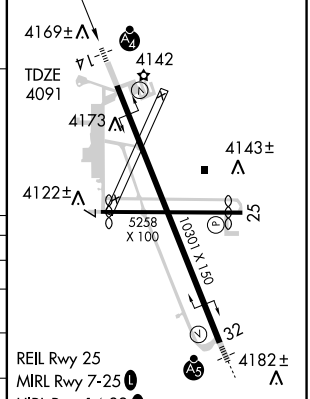
MALSF

MISSED APPROACH: Climb to 9200 direct LAGYI and via 166° track to MUREX and hold, continue climb-in-hold to 9200.

ATIS	KINGSLEY APP CON ★	KINGSLEY TOWER ★	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95







CATEGORY	A	B	C	D
LPV DA	4635-2 544 (600-2)			
LNAV/VNAV DA	NA			
LNAV MDA	4920-¾ 829 (900-¾)	4920-1¼ 829 (900-1¼)	4920-2½ 829 (900-2½)	4920-2¾ 829 (900-2¾)
CIRCLING	4920-2 825 (900-2)	4980-2 885 (900-2)	4980-2¾ 885 (900-2¾)	5060-3 965 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC LMT	APP CRS	Rwy Idg	10301
115.9	134°	TDZE	4091
Chan 106		Apt Elev	4095

VOR/DME or TACAN RWY 14

KLAMATH FALLS (LMT)

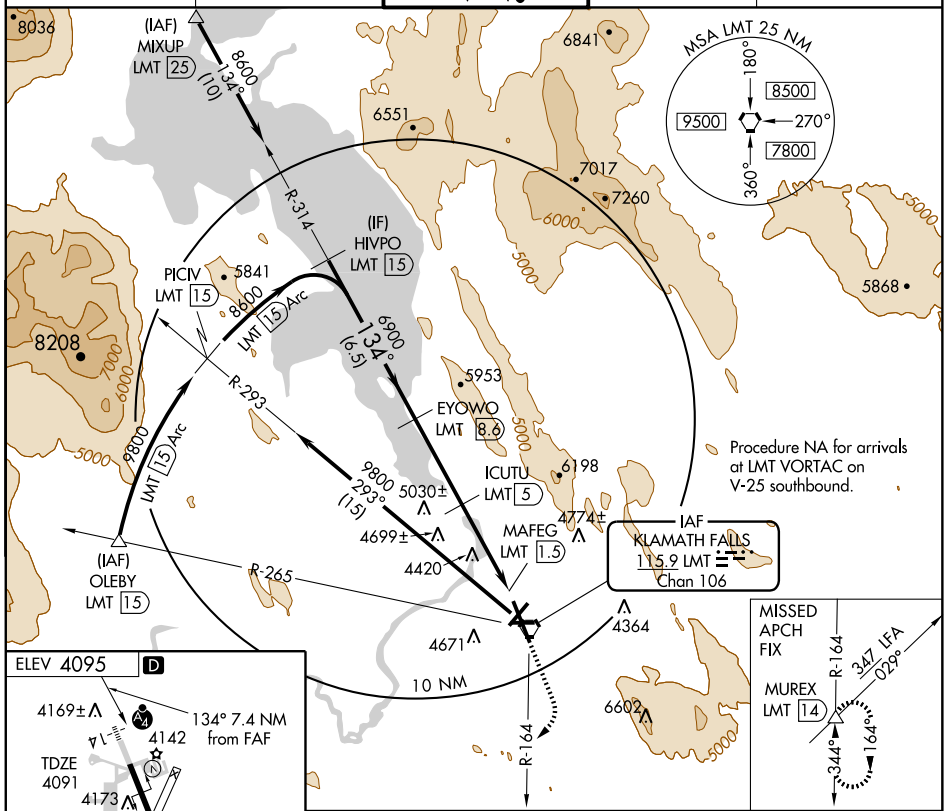
ASR/PAR

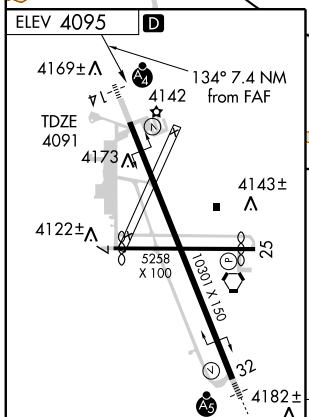
Cat E circling NA northeast of Rwy 14-32.
For inoperative MALSF increase S-14 Cat E visibility to 2¾, inoperative table does not apply to Cats B, C, and D.
Visibility reduction by helicopters NA.

MALSF

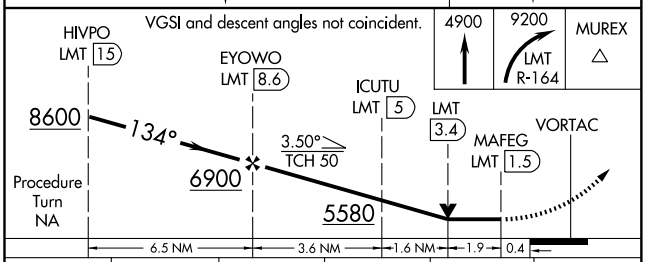
MISSED APPROACH: Climb to 4900 then climbing right turn to 9200 via LMT R-164 to MUREX/14 DME and hold, continue climb-in-hold to 9200.

ATIS	KINGSLEY APP CON ★	KINGSLEY TOWER ★	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95





REIL Rwy 25
MIRL Rwy 7-25 L
HIRL Rwy 14-32 L



CATEGORY	A	B	C	D	E
S-14	4860-¾ 769 (800-¾)	4860-1¼ 769 (800-1¼)	4860-2¼ 769 (800-2¼)	4860-2½	769 (800-2½)
CIRCLING	4860-1 765 (800-1)	4980-1¼ 885 (900-1¼)	4980-2¾ 885 (900-2¾)	5060-3 965 (1000-3)	5600-3 1505 (1600-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

KLAMATH FALLS, OREGON

AL-473 (FAA)

VORTAC LMT	APP CRS	Rwy Idg	10301
115.9	328°	TDZE	4092
Chan 106		Apt Elev	4092

VOR/DME or TACAN RWY 32

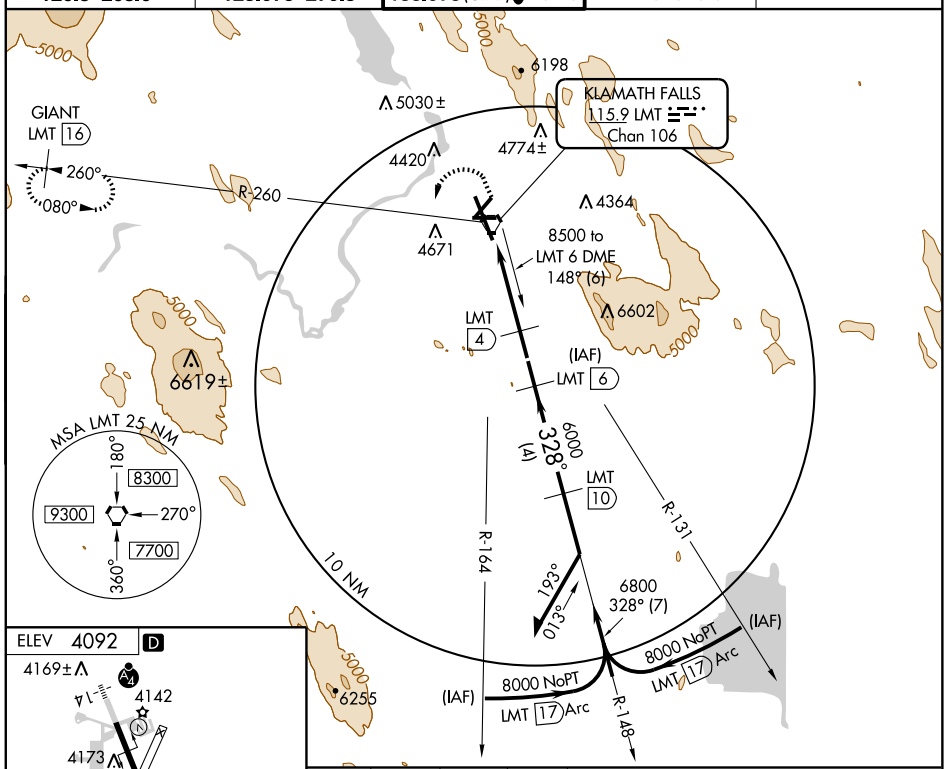
KLAMATH FALLS (LMT)

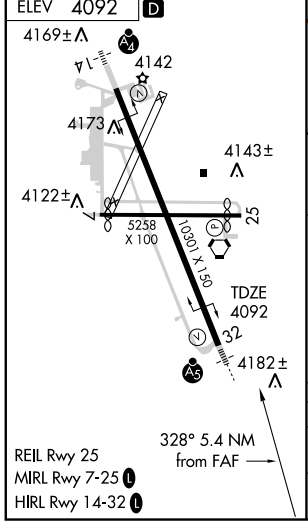
Cat. E procedure turn NA.
* Cat. E circling NA northeast of Rwy 14-32.
ASR/PAR S-32 Cat. D visibility increased to RVR 6000 for inoperative ALSF-1.

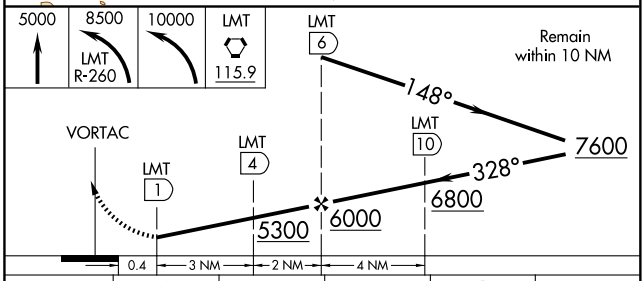
MALSR

MISSED APPROACH: Climb to 5000 then climbing left turn to 8500 via LMT R-260 then climbing left turn to 10000 direct LMT VORTAC. (TACAN aircraft continue climb on R-260 to 10000 to GIANT/16 DME and hold East, left turns, 260 inbound.)

ATIS	KINGSLEY APP CON *	KINGSLEY TOWER *	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95







CATEGORY	A	B	C	D	E
S-32	4500/24	408 (500-½)	4500/40	408 (500-¾)	4500/50	408 (500-1)
CIRCLING *	4840-1	748 (800-1)	4980-1¼	888 (900-1¼)	4980-2¾	888 (900-2¾)	5000-3	908 (1000-3)	5500-3	1408 (1500-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

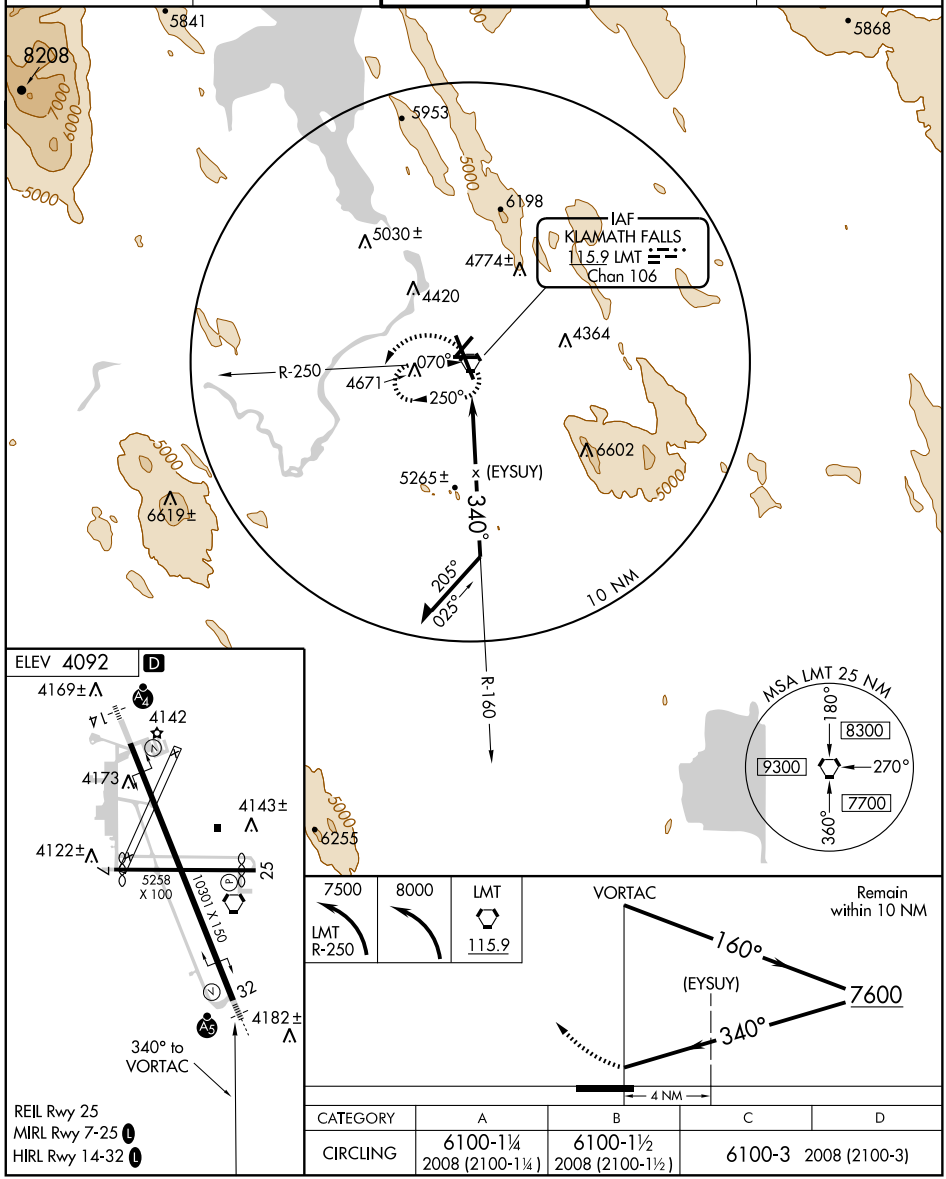
VORTAC LMT	APP CRS	Rwy Idg	N/A
115.9	340°	TDZE	N/A
Chan 106		Apt Elev	4092

VOR or GPS-B
KLAMATH FALLS (LMT)

ASR/PAR

MISSED APPROACH: Climbing left turn to 7500 via LMT R-250, then climbing left turn to 8000 direct LMT VORTAC and hold.

ATIS	KINGSLEY APP CON★	KINGSLEY TOWER★	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95



CATEGORY	A	B	C	D
CIRCLING	6100-1¼ 2008 (2100-1¼)	6100-1½ 2008 (2100-1½)	6100-3 2008 (2100-3)	

NDB LGD 296	APP CRS 194°	Rwy Idg N/A TDZE N/A Apt Elev 2717

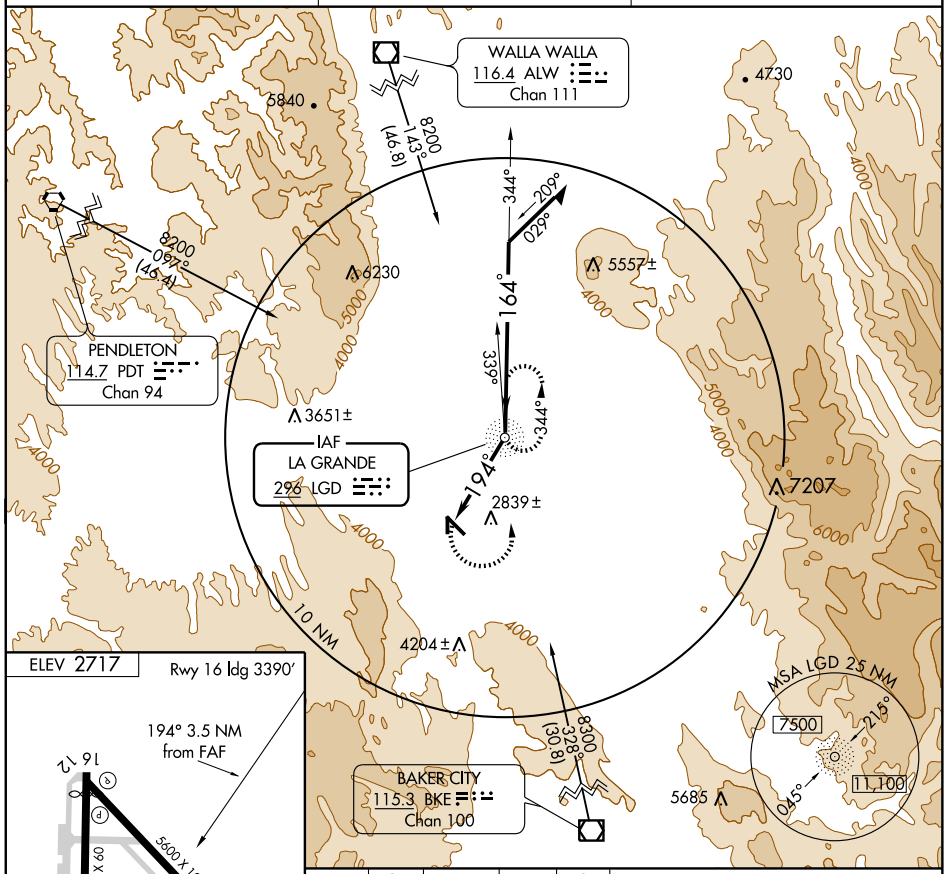
NDB-B

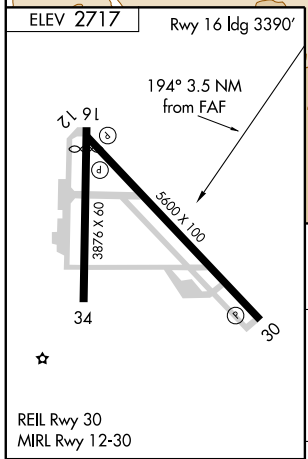
LA GRANDE/UNION COUNTY (LGD)

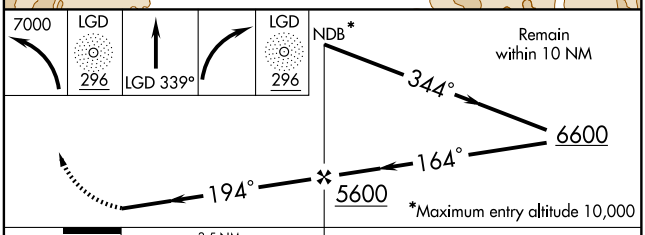
NA

MISSED APPROACH: Climbing left turn to 7000 direct LGD NDB and 339° bearing from LGD NDB, then right turn direct LGD NDB and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.075	132.6 269.35	122.8 (CTAF)







FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

CATEGORY	A	B	C	D
CIRCLING	4360-1¼ 1643 (1700-1¼)	4360-1½ 1643 (1700-1½)	4360-3 1643 (1700-3)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	3390
CH 66000	163°	TDZE	2714
W16A		Apt Elev	2717

RNAV (GPS) RWY 16

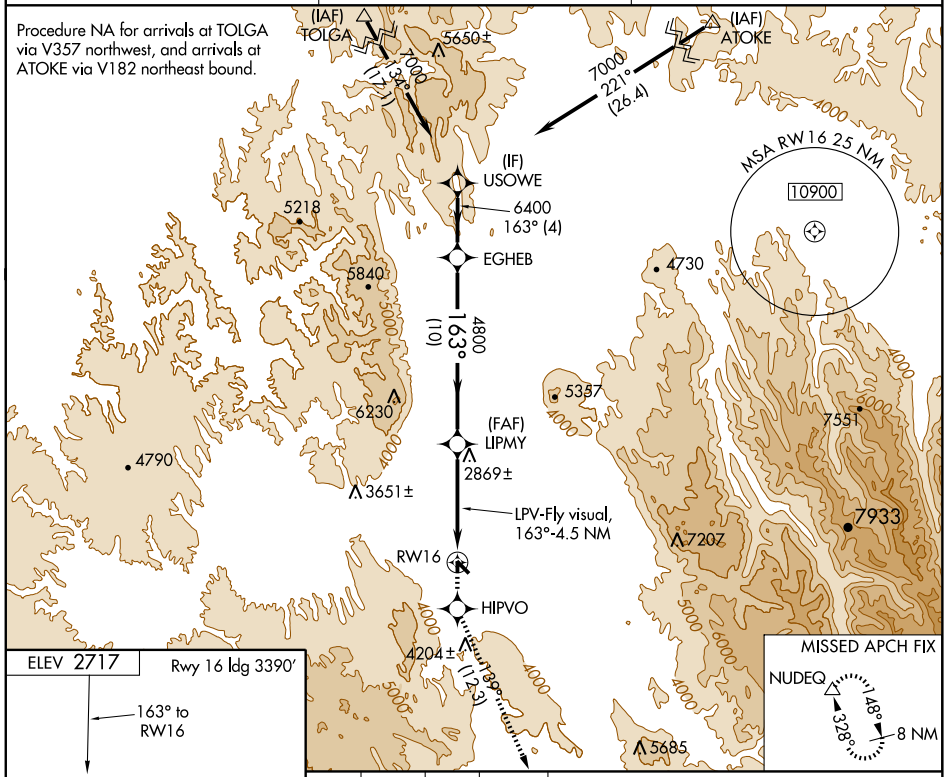
LA GRANDE/UNION COUNTY (LGD)

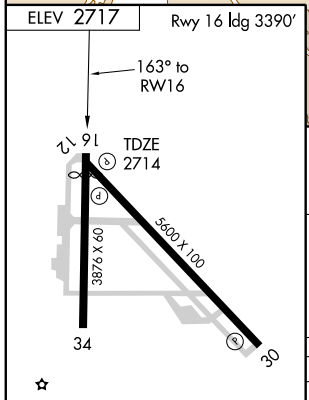
NA — DME/DME RNP-0.3 NA. If local altimeter setting not received procedure NA.

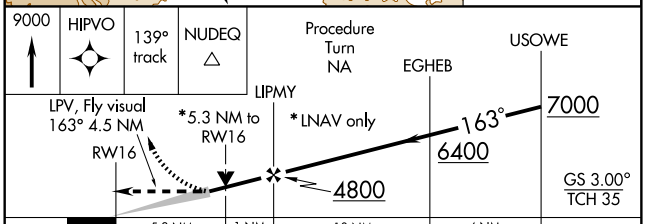
MISSED APPROACH: Climb to 9000 direct HIPVO and via 139° track to NUDEQ and hold, continue climb-in-hold to 9000.

AWOS-3	SEATTLE CENTER	UNICOM
135.075	132.6 269.35	122.8 (CTAF)

Procedure NA for arrivals at TOLGA via V357 northwest, and arrivals at ATOKE via V182 northeast bound.







CATEGORY	A	B	C	D
LPV DA	4173-2 1459 (1500-2)		4173-3 1459 (1500-3)	
LNAV/VNAV DA	NA			
LNAV MDA	4440-1¼ 1726 (1800-1¼)	4440-1½ 1726 (1800-1½)	4440-3 1726 (1800-3)	
CIRCLING	4440-6 1723 (1800-6)			

REIL Rwy 30
MIRL Rwy 12-30

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5306
343°	TDZE	4725
	Apt Elev	4729

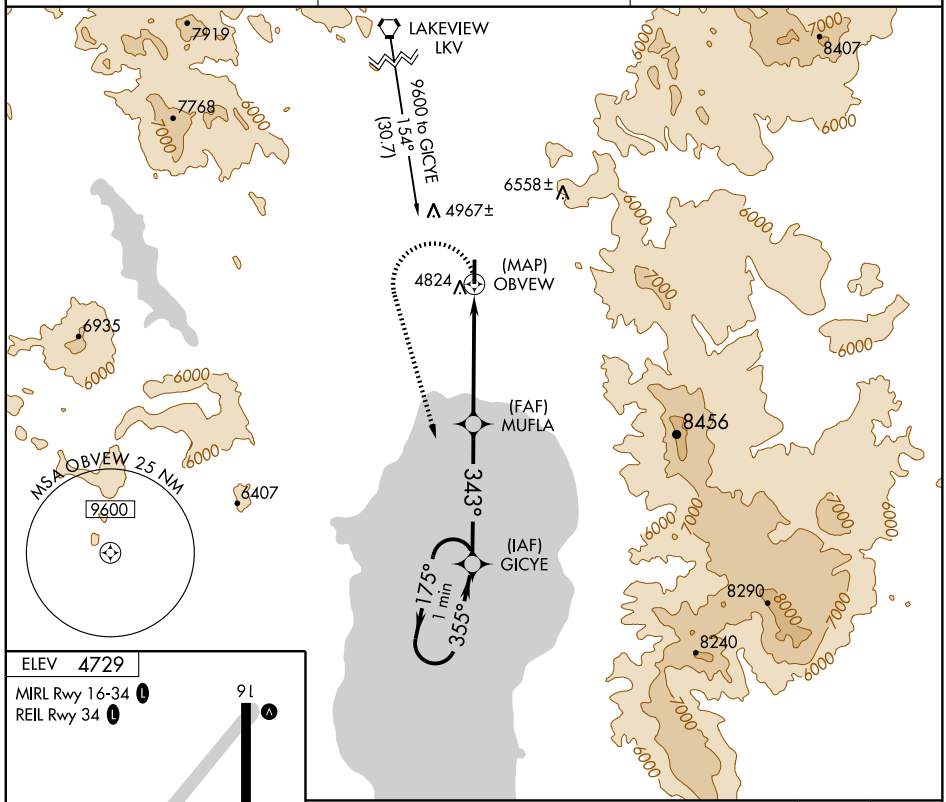
GPS RWY 34

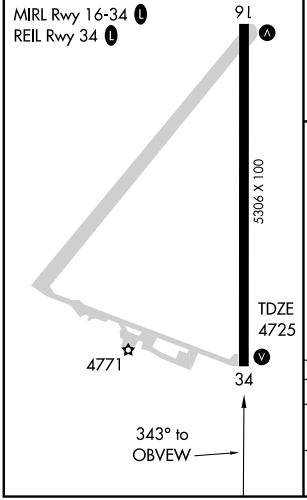
LAKEVIEW / LAKE COUNTY (LKV)

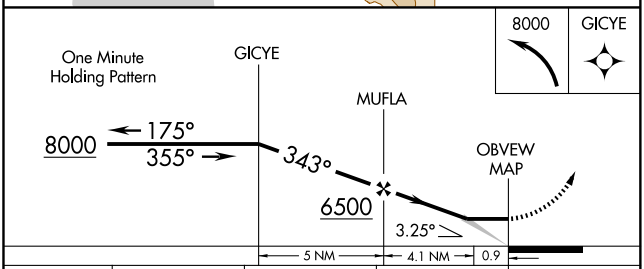
NA

MISSED APPROACH: Climbing left turn to 8000, direct GICYE WP and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.525	127.6 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-34	5080-1 355 (400-1)			5080-1¼ 355 (400-1¼)
CIRCLING	5160-1 431 (500-1)	5180-1 451 (500-1)	5180-1½ 451 (500-1½)	5280-2 551 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

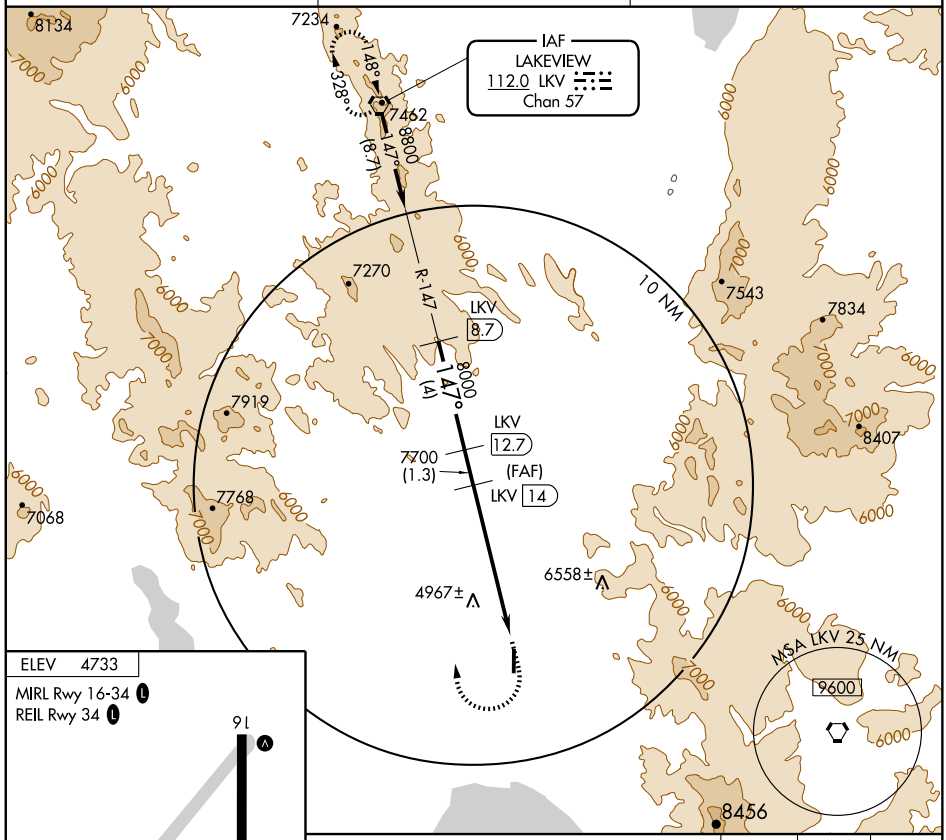
VORTAC LKV 112.0 Chan 57	APP CRS 147°	Rwy Idg N/A TDZE N/A Apt Elev 4733

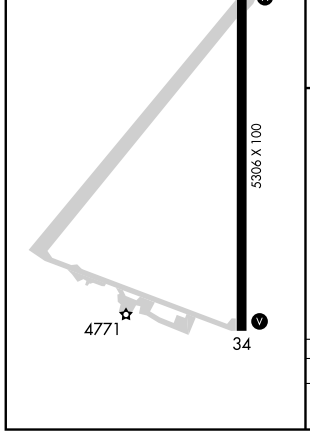
VOR/DME-A

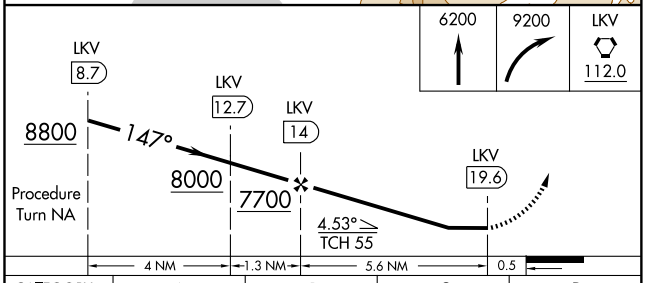
LAKEVIEW / LAKE COUNTY (LKV)

MISSED APPROACH: Climb to 6200 then climbing right turn to 9200 direct LKV VORTAC and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.525	127.6 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5600-1 867 (900-1)	5600-1¼ 867 (900-1¼)	5600-2½ 867 (900-2½)	5600-2¾ 867 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

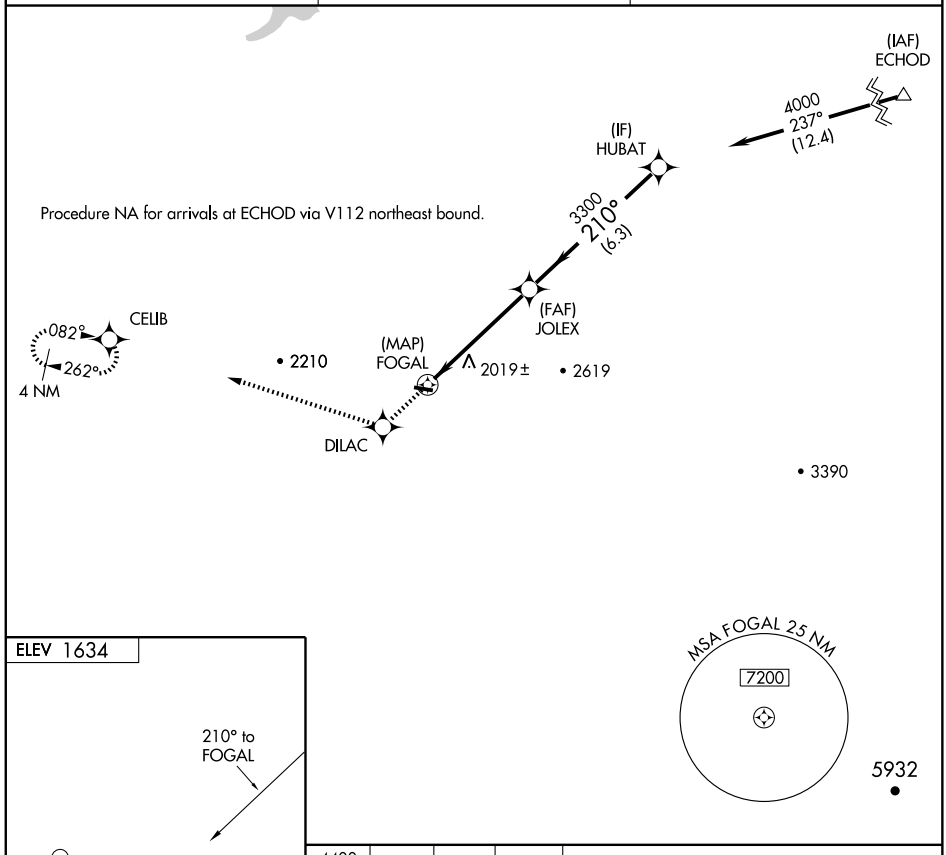
APP CRS	Rwy Idg	N/A
210°	TDZE	N/A
	Apt Elev	1634

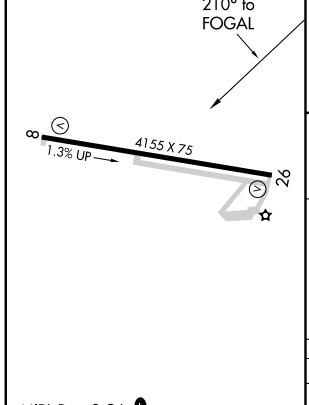
RNAV (GPS)-A
LEXINGTON (9S9)

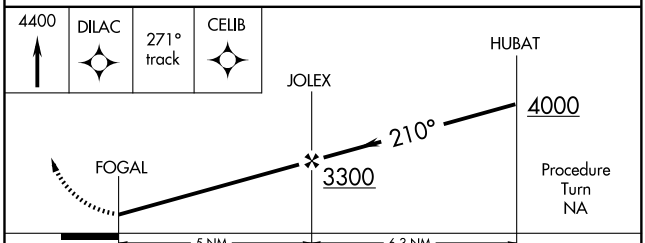
If local altimeter setting not received, use Hermiston altimeter setting and increase all MDAs 220 feet. Procedure NA at night.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 4400 direct DILAC WP and via 271° track to CELIB WP and hold.

AWOS-3	SEATTLE CENTER	CTAF
134.475	132.6 269.35	122.9 L







CATEGORY	A	B	C	D
CIRCLING	2380-1 746 (800-1)	2460-1¼ 826 (900-1¼)	2480-2½ 846 (900-2½)	2520-3 886 (900-3)

MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4155
082°	TDZE	1613
	Apt Elev	1634

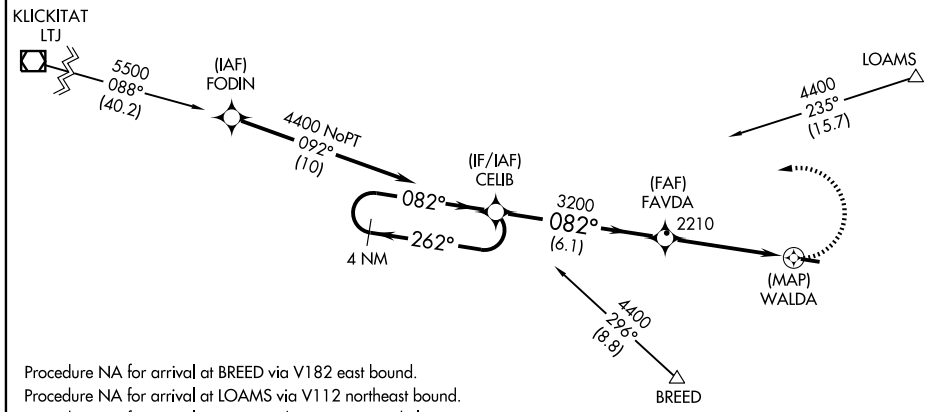
RNAV (GPS) RWY 8

LEXINGTON (9S9)

If local altimeter setting not received, use Hermiston altimeter setting and increase all MDAs 220 feet.
NA Procedure NA at night.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

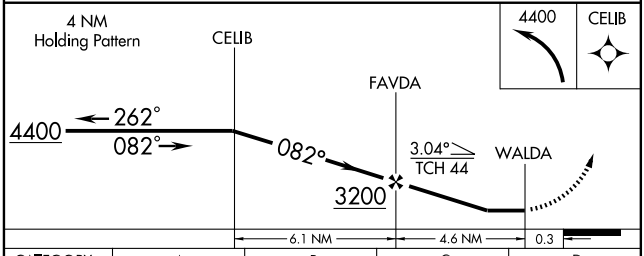
MISSED APPROACH: Climbing left turn to 4400 direct CELIB WP and hold.

AWOS-3	SEATTLE CENTER	CTAF
134.475	132.6 269.35	122.9 L



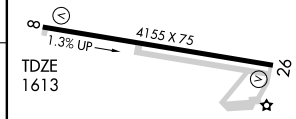
Procedure NA for arrival at BREED via V182 east bound.
Procedure NA for arrival at LOAMS via V112 northeast bound.
Procedure NA for arrival on LTJ VOR/DME airway radials 032 CW 116.

3558±



CATEGORY	A	B	C	D
LNAV MDA	2120-1 507 (500-1)		2120-1½ 507 (500-1½)	
CIRCLING	2380-1 746 (800-1)	2460-1¼ 826 (900-1¼)	2480-2½ 846 (900-2½)	2520-3 886 (900-3)

ELEV 1634



MIRL Rwy 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

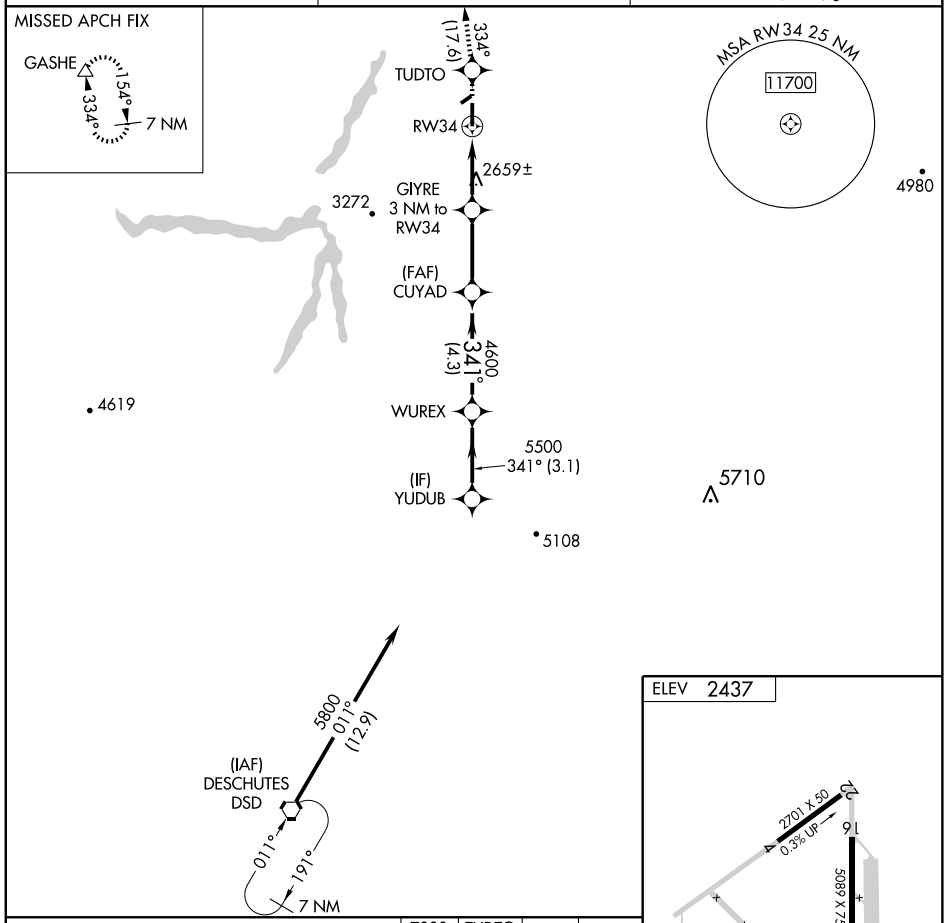
APP CRS	Rwy Idg	N/A
341°	TDZE	N/A
	Apt Elev	2437

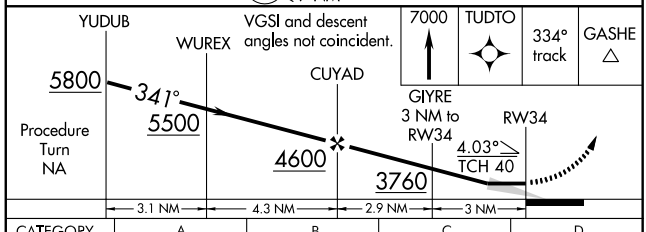
RNAV (GPS)-A
MADRAS MUNI (S33)

DME/DME RNP-0.3 NA.
Use Redmond altimeter setting; if not received, procedure NA.

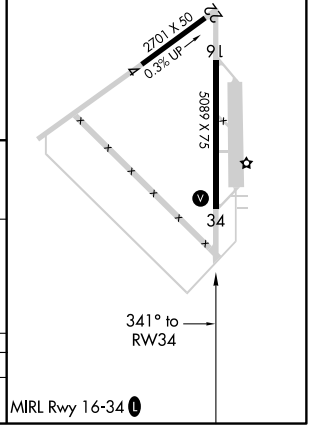
MISSED APPROACH: Climb to 7000 direct TUDTO and via 334° track to GASHE and hold, continue climb-in-hold to 7000.

REDMOND ASOS	SEATTLE CENTER	UNICOM
119.025	128.15 257.75	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	3520-1¼ 1083 (1100-1¼)	3540-1½ 1103 (1200-1½)	3600-3 1163 (1200-3)	NA



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-MMV	APP CRS	Rwy Idg	5420
110.9	218°	TDZE	161
		Apt Elev	163

ILS or LOC RWY 22

MC MINNVILLE MUNI (MMV)

DME Required.
When local altimeter setting not received, use Aurora State altimeter setting and increase all DA and MDA 60 feet. Increase all visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 900 then climbing right turn to 3000 via heading 069° and UBG VOR/DME R-204 to LUSEY/UBG VOR/DME 6 DME and hold, continue climb-in-hold to 3000.

ASOS	PORTLAND APP CON	SEATTLE CENTER	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L

Procedure NA for arrivals on BTG VORTAC airway radials 160 CW 175.

IAF
BATTLEGROUND
116.6 BTG
Chan 113

3100 NoPT
185° (24.8)

TOCBU INT
BTG 24.8

R-185

R-054

2900
185° (4.9)

1726

NEWBERG
117.4 UBG
Chan 121

3800
111° (4.4)

038°

1 min

218°

BTG R-196

R-177

R-144

(IF/IAF)
OZIER INT
UBG 4.4
BTG 29.7

LUSEY
UBG 6

1100

1900

2500
218° (2.5)

R-111

024°

204°

539±

218°

(3.8)

(IAF)
RAWER

2704

364±

R-204

UNECE INT

LIYEV INT

2900 NoPT
291° (6.1)

LOCALIZER 110.9
I-MMV

886

10 NM

MSA UBG 25 NM
170°
3100
4800
260°
3600
350°

ELEV 163

218° 5.2 NM from FAF

TDZE 161

5420 X 150

4676 X 150

228

35

231

REIL Rwy 4 L
HIRL Rwy 4-22 L

900	3000	UBG R-204 117.4	LUSEY △
	069°		

OZIER INT
UBG 4.4

UNECE INT

One Minute Holding Pattern

LIYEV INT

1900

038°

218°

2900

218°

2500

1900

GS 3.00°
TCH 57

5.2 NM 3.8 NM 2.5 NM

CATEGORY	A	B	C	D
S-ILS 22	361-½ 200 (200-½)			
S-LOC 22	600-½ 439 (500-½)		600-¾ 439 (500-¾)	600-1 439 (500-1)
CIRCLING	640-1 477 (500-1)		760-1½ 597 (600-1½)	880-2¼ 717 (800-2¼)

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5420
038°	TDZE	161
	Apt Elev	163

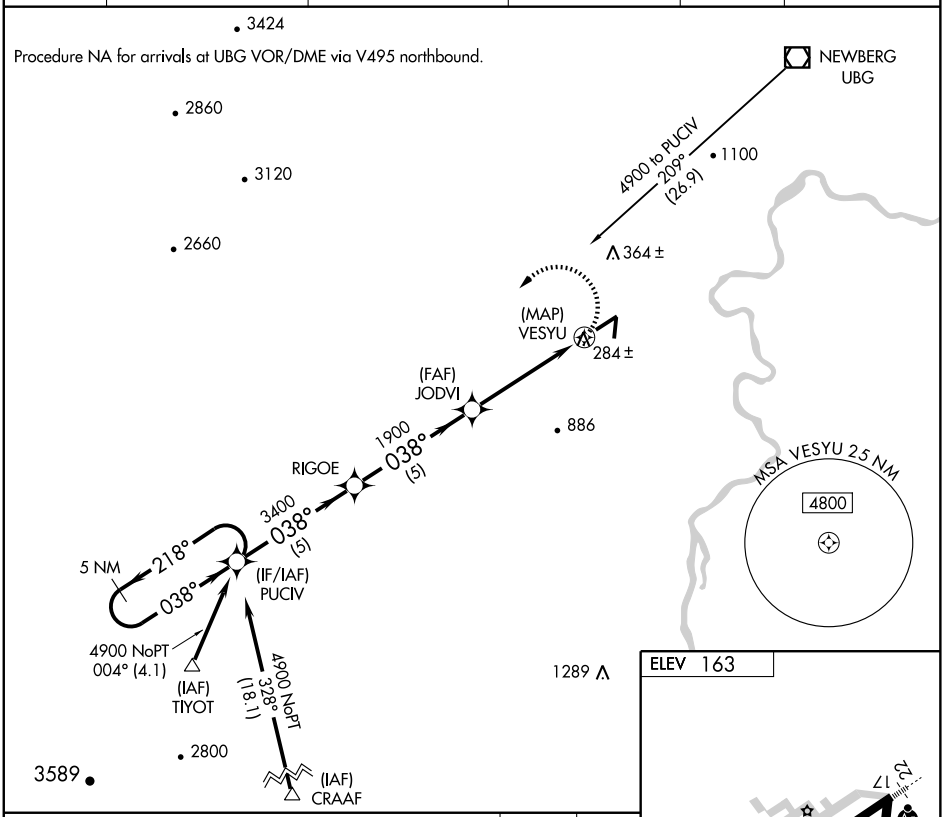
RNAV (GPS) RWY 4

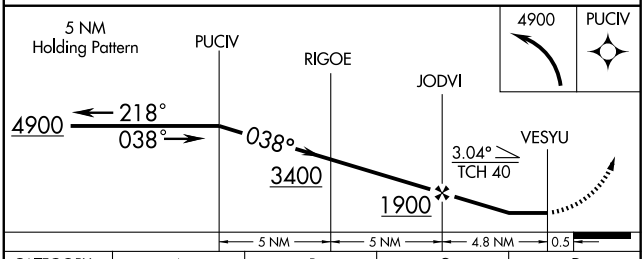
MC MINNVILLE MUNI (MMV)

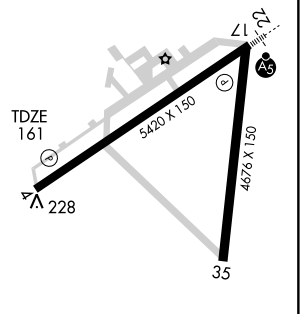
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Aurora State altimeter setting and increase all MDA 60 feet and all visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 4900 direct PUCIV and hold, continue climb-in-hold to 4900.

ASOS	PORTLAND APP CON	SEATTLE CENTER	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	580-1	419 (500-1)	580-1¼	419 (500-1¼)
CIRCLING	640-1	477 (500-1)	760-1½ 597 (600-1½)	880-2¼ 717 (800-2¼)

REIL Rwy 4 L
HIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 50309 W22A	APP CRS 218°	Rwy Idg 5420 TDZE 161 Apt Elev 163

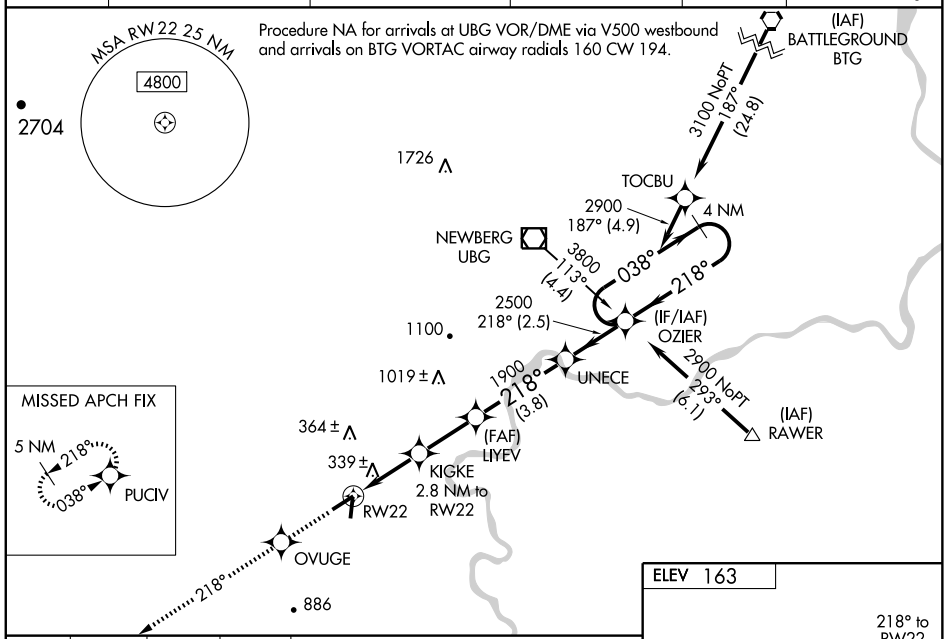
RNAV (GPS) RWY 22
MC MINNVILLE MUNI (MMV)

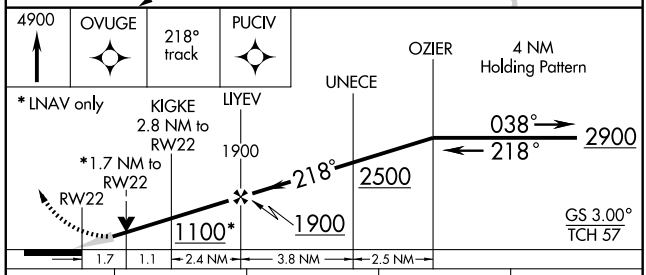
For inoperative MALSR, increase LPV all Cats. visibility to 1.
Baro-VNAV NA when using Aurora State altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.
For inoperative MALSR when using Aurora State altimeter setting increase LPV visibility all Cats. to 1¼. VDP NA when using Aurora State altimeter setting.
When local altimeter setting not received, use Aurora State altimeter setting and increase all DA and MDA 60 feet, increase all visibility ¼ mile.

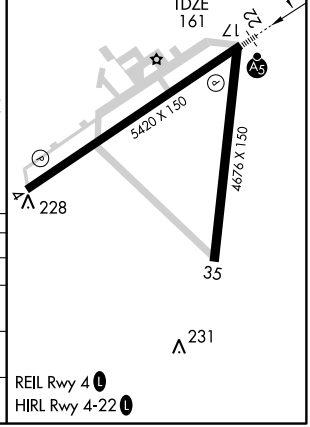
MALSR

MISSED APPROACH: Climb to 4900 direct OVUGE then via 218° track to PUCIV and hold, continue climb-in-hold to 4900.

ASOS	PORTLAND APP CON	SEATTLE CENTER	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	474-½ 313 (400-½)			
LNAV/VNAV DA	633-1¼ 472 (500-1¼)			
LNAV MDA	740-½ 579 (600-½)		740-1 579 (600-1)	740-1¼ 579 (600-1¼)
CIRCLING	740-1 577 (600-1)		760-1½ 597 (600-1½)	880-2¼ 717 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME UBG	APP CRS	Rwy Idg	N/A
117.4	014°	TDZE	N/A
Chan 121		Apt Elev	163

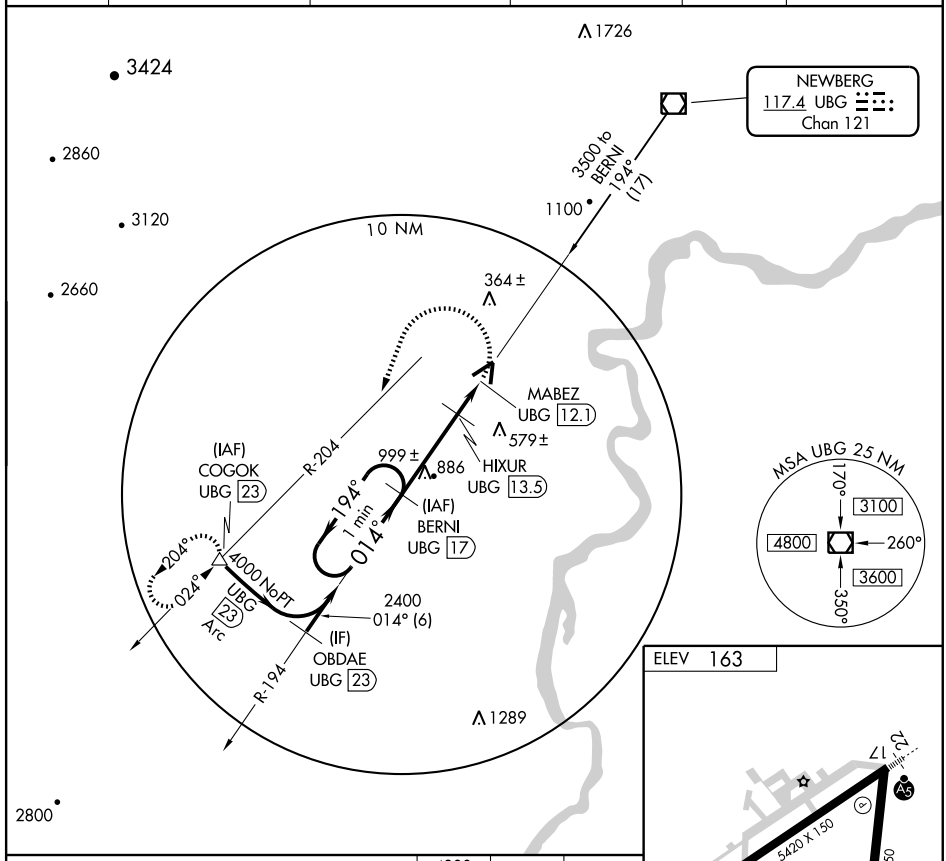
VOR/DME-B

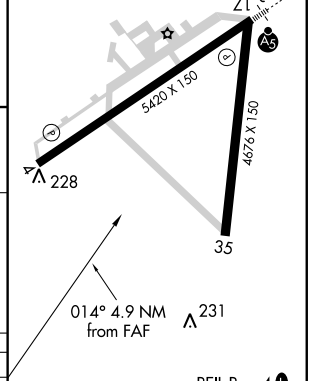
MC MINNVILLE MUNI (MMV)

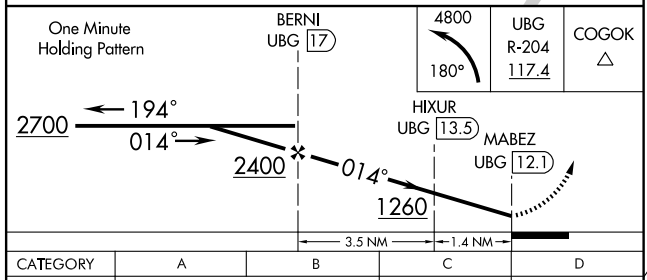
When local altimeter setting not received use Aurora State altimeter setting and increase all MDA 60 feet and all visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 4800 via heading 180° and UBG VOR/DME R-204 to COGOK/UBG 23 DME and hold, continue climb-in-hold to 4800.

ASOS	PORTLAND APP CON	SEATTLE CENTER	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L





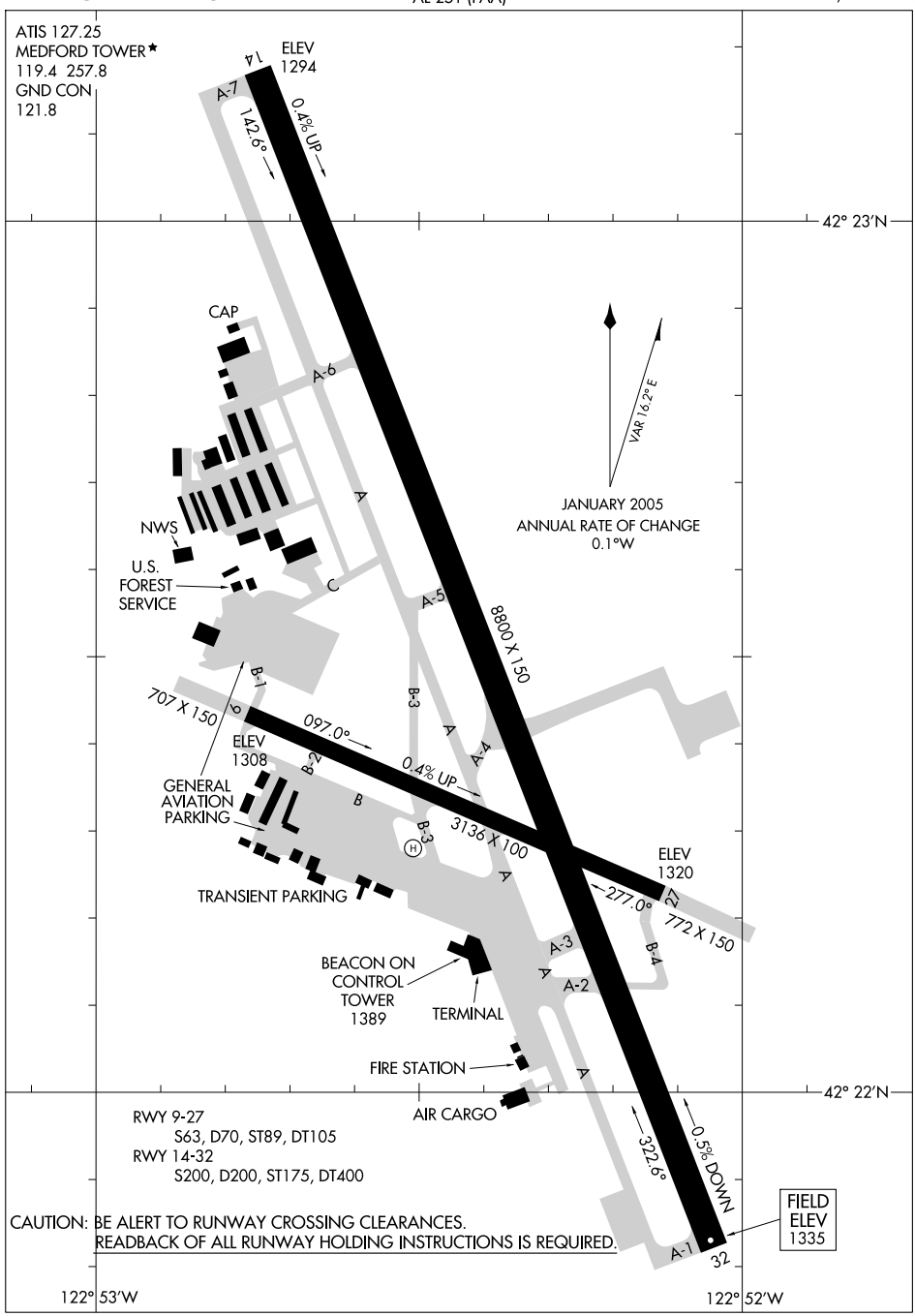


CATEGORY	A	B	C	D
CIRCLING	840-1 677 (700-1)		840-2 677 (700-2)	880-2 ¼ 717 (800-2 ¼)

REIL Rwy 4 L
HIRL Rwy 4-22 L

AIRPORT DIAGRAM

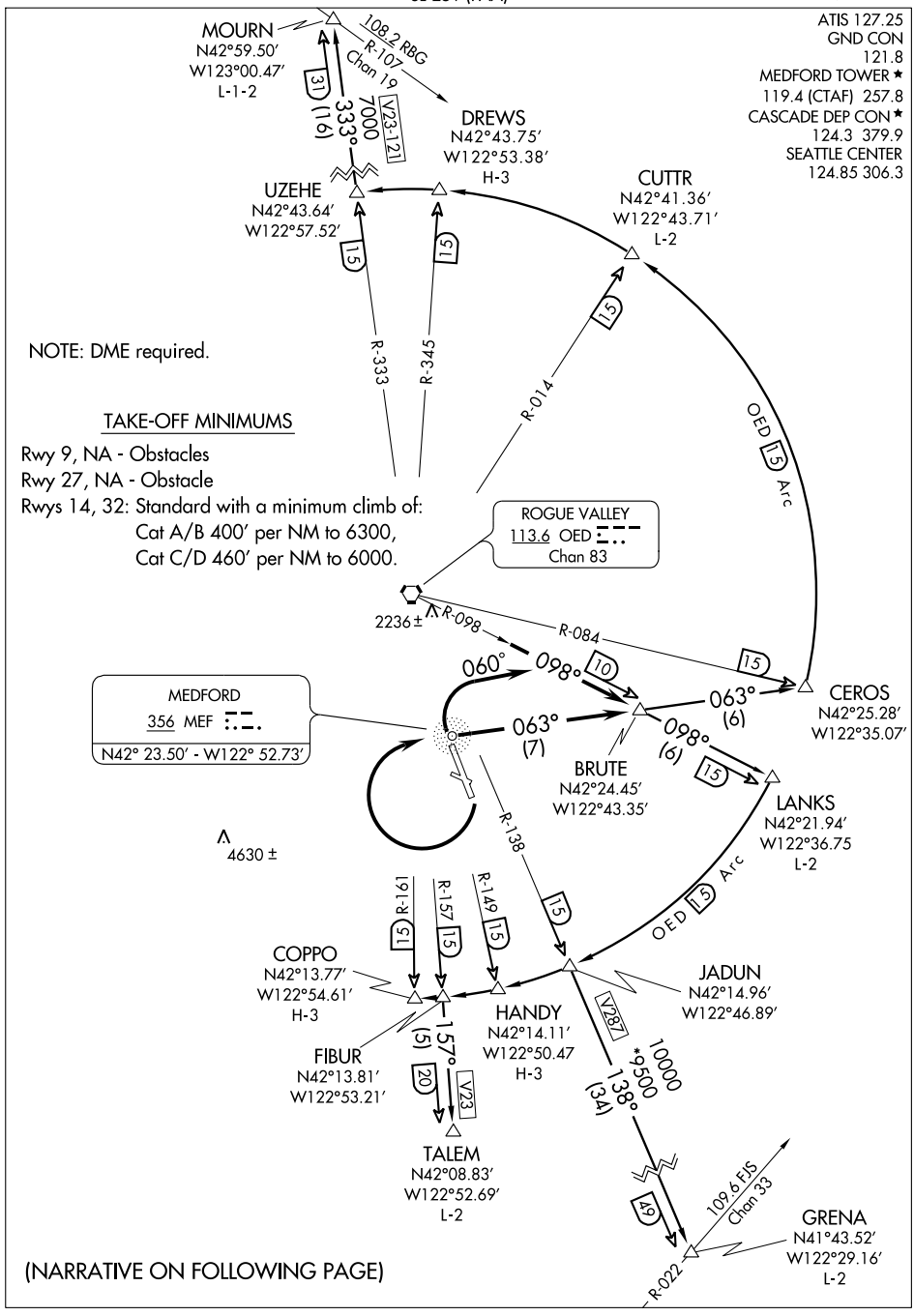
MEDFORD/ ROGUE VALLEY INTL-MEDFORD (MFR)
MEDFORD, OREGON
AL-251 (FAA)



NW-1, 14 JAN 2010 to 11 FEB 2010

BRUTE FIVE DEPARTURE

MEDFORD/ROGUE VALLEY INTL-MEDFORD (MFR)
SL-251 (FAA)
MEDFORD, OREGON



(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 14: Climbing right turn direct to MEF NDB, depart MEF NDB 063° bearing outbound to BRUTE INT. Thence. . . .

TAKE-OFF RUNWAY 32: Climbing right turn via 060° heading and OED R-098 to BRUTE INT. Thence. . . .

. . . . via (transition) or (assigned route). Maintain 11000 or assigned altitude.

COPPO TRANSITION (BRUTE5.COPPO) : From over BRUTE INT via OED R-098 to LANKS INT. Turn right and proceed via the OED 15 DME Arc to COPPO DME.

CUTTR TRANSITION (BRUTE5.CUTTR) : From over BRUTE INT via MEF NDB bearing 063° to CEROS INT. Turn left and proceed via the OED 15 DME Arc to CUTTR DME.

DREWS TRANSITION (BRUTE5.DREWS) : From over BRUTE INT via MEF NDB bearing 063° to CEROS INT. Turn left and proceed via the OED 15 DME Arc to DREWS DME.

GRENA TRANSITION (BRUTE5.GRENA) : From over BRUTE INT via OED R-098 to LANKS INT. Turn right and proceed via the OED 15 DME Arc to JADUN DME. Then via OED R-138 to GRENA INT.

HANDY TRANSITION (BRUTE5.HANDY) : From over BRUTE INT via OED R-098 to LANKS INT. Turn right and proceed via the OED 15 DME Arc to HANDY DME.

LANKS TRANSITION (BRUTE5.LANKS) : From over BRUTE INT via OED R-098 to LANKS INT.

MOURN TRANSITION (BRUTE5.MOURN) : From over BRUTE INT via MEF NDB bearing 063° to CEROS INT. Turn left and proceed via the OED 15 DME Arc to UZEHE DME. Then via OED R-333 to MOURN INT.

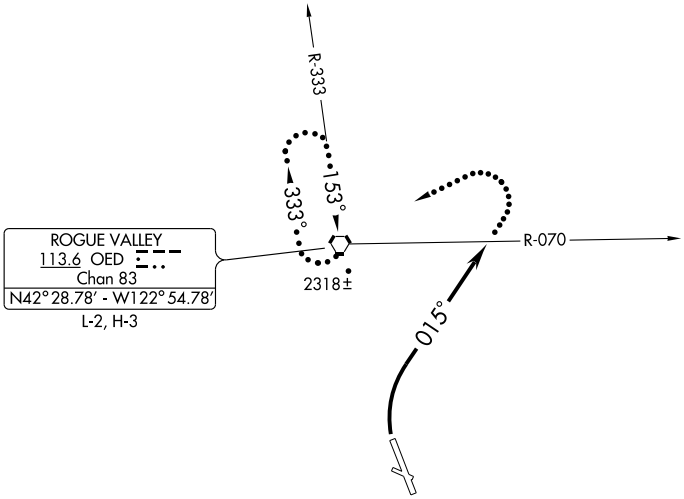
TALEM TRANSITION (BRUTE5.TALEM) : From over BRUTE INT via OED R-098 to LANKS INT. Turn right and proceed via the OED 15 DME Arc to FIBUR DME. Then via OED R-157 to TALEM DME.

UZEHE TRANSITION (BRUTE5.UZEHE) : From over BRUTE INT via MEF NDB bearing 063° to CEROS INT. Turn left and proceed via the OED 15 DME Arc to UZEHE DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

EAGLE THREE DEPARTURE

ATIS 127.25
GND CON
121.8
MEDFORD TOWER★
119.4 257.8
CASCADE DEP CON★
124.3 379.9
SEATTLE CENTER
124.85 306.3



TAKE-OFF MINIMUMS

RWY 32: 1700-3 or standard with minimum climb of 300' per NM to 3000'.

RWYS 9, 14, and 27: Not authorized for this departure procedure.

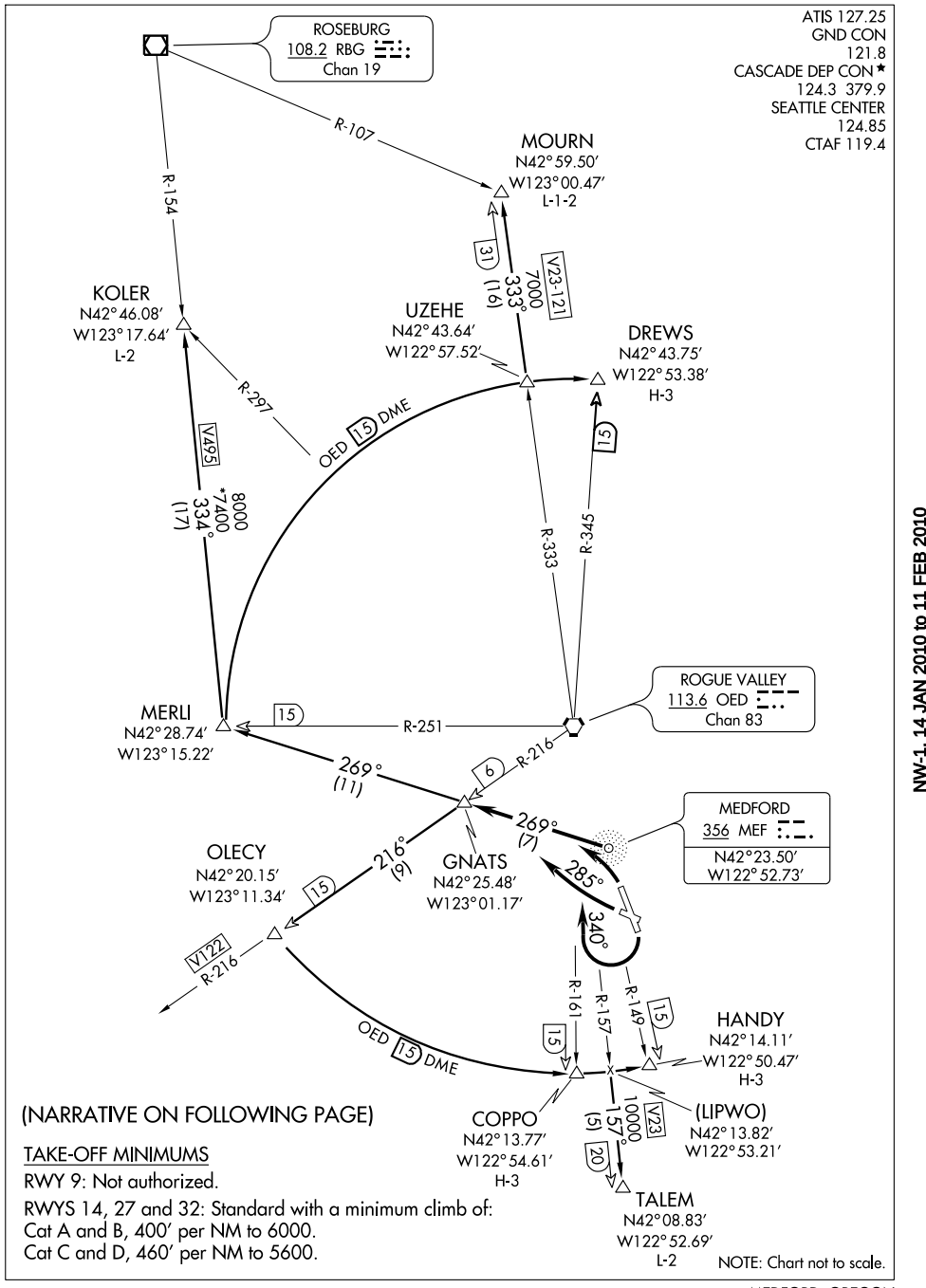
ATC climb rate of 410' per NM until passing 6300 required.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 32: Climbing right turn to heading 015°, maintain 11000' or assigned altitude, expect radar vectors to assigned route. Expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC crossing the OED R-070, turn left, proceed direct OED VORTAC, continue climb in holding pattern (NW, right turn, 153° inbound) to minimum crossing altitude/minimum enroute altitude before proceeding on course.

GNATS THREE DEPARTURE



(NARRATIVE ON FOLLOWING PAGE)

TAKE-OFF MINIMUMS

RWY 9: Not authorized.

RWYS 14, 27 and 32: Standard with a minimum climb of:
Cat A and B, 400′ per NM to 6000.
Cat C and D, 460′ per NM to 5600.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 14: Climbing right turn via 340° heading and MEF NDB 269° bearing outbound to GNATS INT. Thence. . . .

TAKE-OFF RUNWAY 27: Climbing right turn via 285° heading and MEF NDB 269° bearing outbound to GNATS INT. Thence. . . .

TAKE-OFF RUNWAY 32: Climbing left turn via MEF NDB 269° bearing outbound to GNATS INT. Thence. . . .

. . . .via (transition) or (assigned route). Maintain 10,000' or assigned lower altitude.

COPPO TRANSITION (GNATS3.COPPO): From over GNATS INT via OED R-216 to OLECY INT, then via the OED 15 DME Arc to COPPO DME.

DREWS TRANSITION (GNATS3.DREWS): From over GNATS INT via the MEF NDB 269° bearing to MERLI INT, then via the OED 15 DME Arc to DREWS DME.

HANDY TRANSITION (GNATS3.HANDY): From over GNATS INT via the OED R-216 to OLECY INT, then via the OED 15 DME Arc to HANDY DME.

KOLER TRANSITION (GNATS3.KOLER): From over GNATS INT via MEF NDB 269° bearing to MERLI INT, then via RBG R-154 to KOLER INT.

MOURN TRANSITION (GNATS3.MOURN): From over GNATS INT via MEF NDB 269° bearing to MERLI INT, then via the OED 15 DME Arc to intercept OED R-333 to MOURN INT.

TALEM TRANSITION (GNATS3.TALEM): From over GNATS INT via OED R-216 to OLECY INT, then via the OED 15 DME Arc to intercept OED R-157 to TALEM DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-MFR	APP CRS	Rwy Idg	8800
110.3	140°	TDZE	1303
Chan 40		Apt Elev	1335

ILS or LOC/DME RWY 14

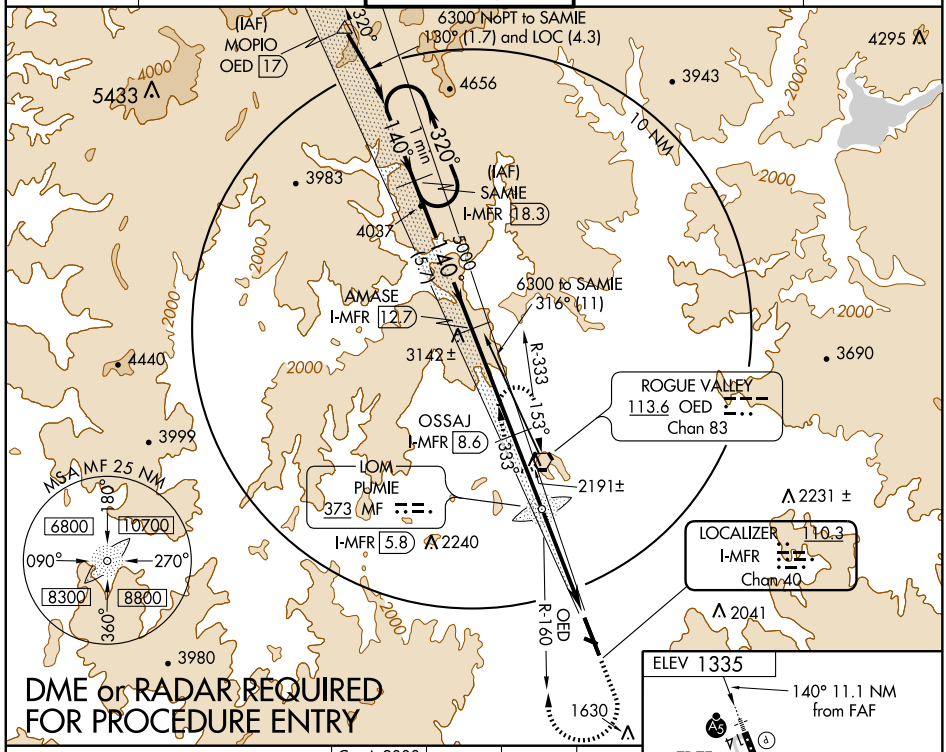
MEDFORD/ ROGUE VALLEY INTL-MEDFORD (MFR)

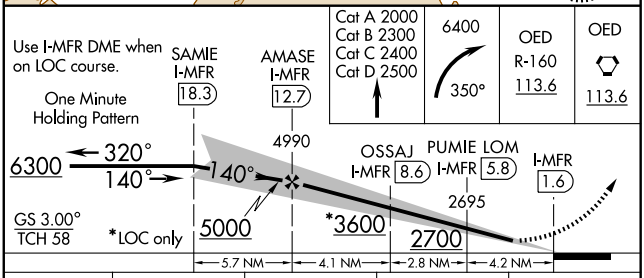
For inoperative MALSR, increase S-ILS 14 CAT B visibility to RVR 6000, CAT C visibility to 1½ mile, and CAT D visibility to 2 miles.

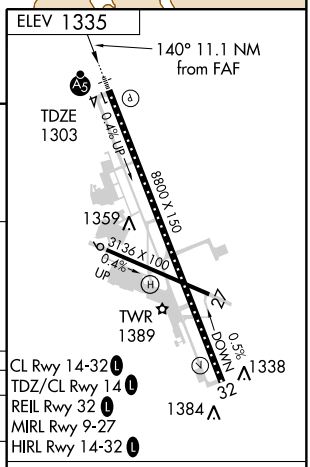
MALSR

MISSED APPROACH: Cat A climb to 2000; Cat B climb to 2300; Cat C climb to 2400; Cat D climb to 2500, then climbing right turn to 6400 via heading 350° and OED R-160 to OED VORTAC and hold, continue climb-in-hold to 6400.

ATIS	CASCADE APP CON*	MEDFORD TOWER*	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95







CATEGORY	A	B	C	D
S-ILS 14	1553/24 250 (300-½)	1634/40 331 (300-¾)	1753/50 450 (500-1)	1862-1½ 559 (600-1½)
S-LOC 14	1640/24 337 (400-½)	1800/24 497 (500-½)	1920/60 617 (600-1¼)	2000-1¾ 697 (700-1¾)
CIRCLING	2000-1 665 (700-1)		2000-1¾ 665 (700-1¾)	2140-2½ 805 (900-2½)

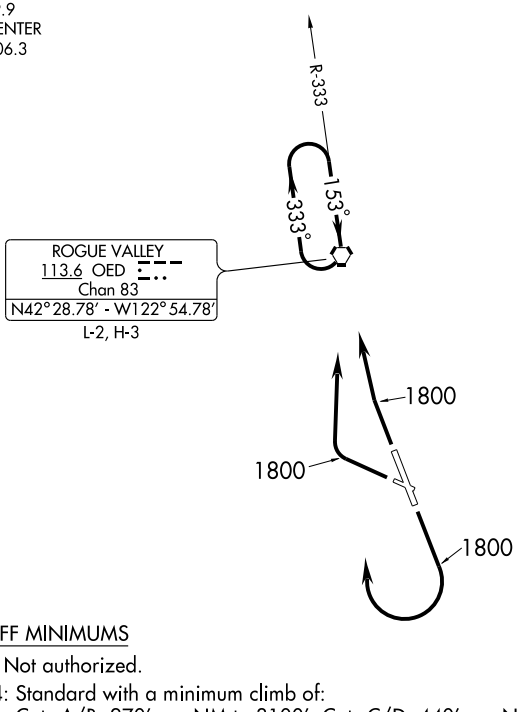
Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

JACKSON SEVEN DEPARTURE

MEDFORD/ROGUE VALLEY INTL-MEDFORD (MFR)
SL-251 (FAA)
MEDFORD, OREGON

ATIS 127.25
GND CON
121.8
MEDFORD TOWER★
119.4 257.8
CASCADE DEP CON★
124.3 379.9
SEATTLE CENTER
124.85 306.3



TAKE-OFF MINIMUMS

RWY 9: Not authorized.

RWY 14: Standard with a minimum climb of:
Cats A/B, 270′ per NM to 3100′, Cats C/D, 440′ per NM to 4900.

RWY 27: Standard with minimum climb of 360′ per NM to 3600.

RWY 32: Standard with a minimum climb of 300′ per NM to 3000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Not authorized.

TAKE-OFF RUNWAYS 14 and 27: Climb runway heading to 1800 then turn right. Thence. . . .

TAKE-OFF RUNWAY 32: Climb runway heading to 1800. Thence. . . .

. . . . climb direct to the OED VORTAC. Continue climb in OED holding pattern (NW, right turn, 153° inbound) at or above 7000′ before proceeding on course.

LOC/DME I-MFR	APP CRS	Rwy Idg	N/A
110.3	320°	TDZE	N/A
Chan 40		Apt Elev	1331

LOC/DME BC-B

MEDFORD/ ROGUE VALLEY INTL-MEDFORD (MFR)

MISSED APPROACH: Climb to 7600 direct OED VORTAC and hold, continue climb-in-hold to 7600.

ATIS	CASCADE APP CON★	MEDFORD TOWER ★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95

ROGUE VALLEY 113.6 OED Chan 83

LOCALIZER 110.3 I-MFR Chan 40

10000 to Ashie 141° (23.4)

R-145 R-216 R-098

9300 NoPT to Ashie

OED 24 DME

BACK COURSE

ELEV 1331

8800 X 150

3136 X 100

0.4% UP

0.5% DOWN

TWR 1389

CL Rwy 14-32 L
TDZ/CL Rwy 14 L
REIL Rwy 32 L
MIRL Rwy 9-27
HIRL Rwy 14-32 L

7600 | OED 113.6

Disregard glide slope indications

I-MFR 0.5 | I-MFR 9 | I-MFR 11 | I-MFR 13 | ASHIE I-MFR 16

7200 | 7800 | 8400 | 9300

140° → 320°

4 NM Holding Pattern

Use I-MFR DME when on Localizer Course

0.6 | 8.5 NM | 2 NM | 2 NM | 3 NM

MSA OED 25 NM

090°	7000	10700
100°		280°
	8300	8800
010°		

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	3540-1¼ 2209 (2300-1¼)	3540-1½ 2209 (2300-1½)	3540-3 2209 (2300-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
325°	TDZE	N/A
	Apt Elev	1335

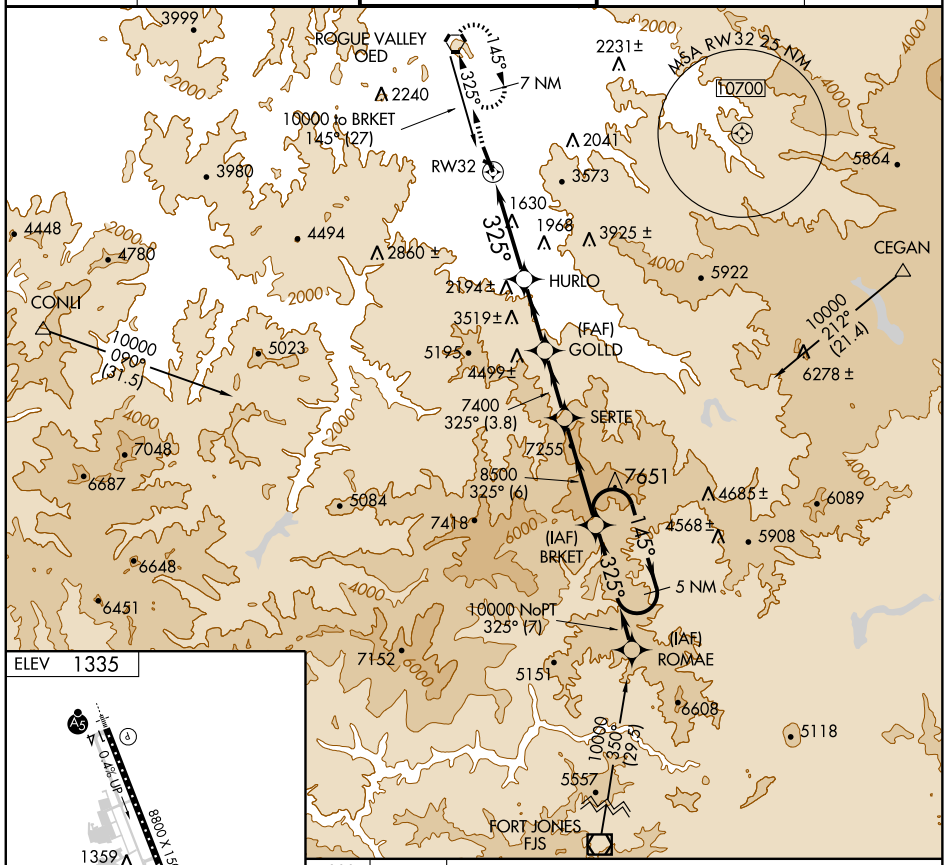
RNAV (GPS)-D

MEDFORD/ROGUE VALLEY INTL-MEDFORD (MFR)

DME/DME RNP-0.3 not authorized.

MISSED APPROACH: Climb to 7800 direct OED VORTAC and hold, continue climb-in-hold to 7800.

ATIS	CASCADE APP CON★	MEDFORD TOWER★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95



CATEGORY	A	B	C	D
CIRCLING	3600-1¼ 2265 (2300-1¼)	3600-1½ 2265 (2300-1½)	3600-3 2265 (2300-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	8800
140°	TDZE	1303
	Apt Elev	1335

RNAV (GPS) RWY 14

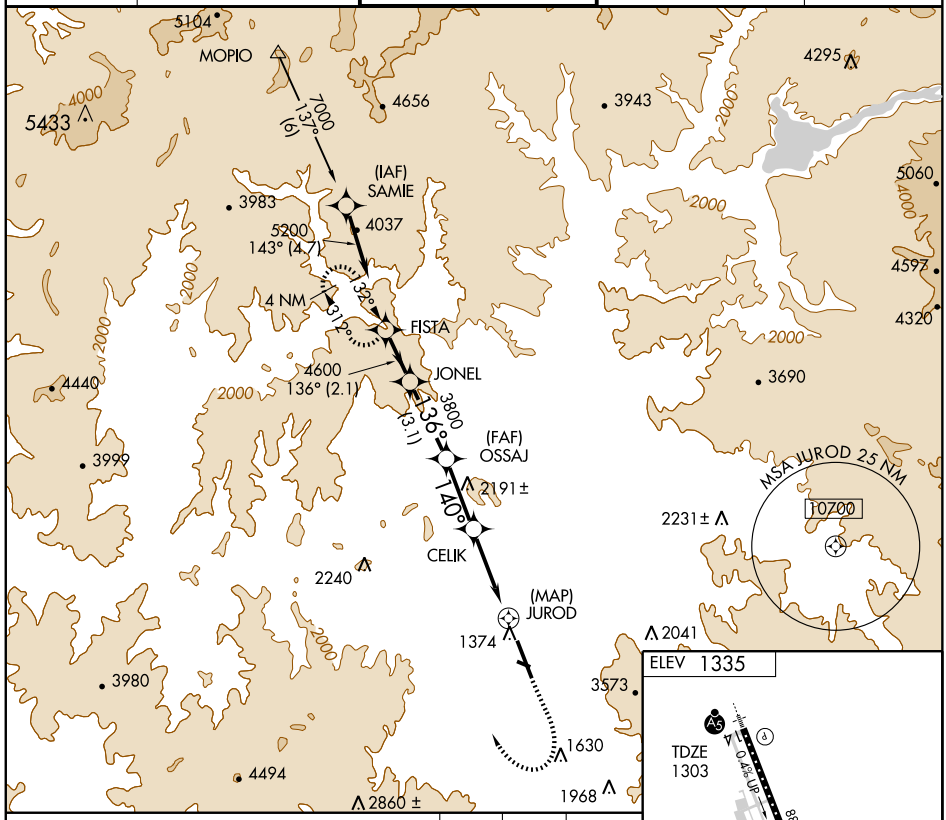
MEDFORD/ROGUE VALLEY INTL-MEDFORD (MFR)

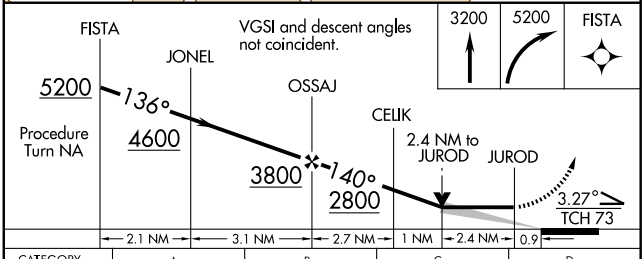
DME/DME RNP-0.3 NA.

MALSR

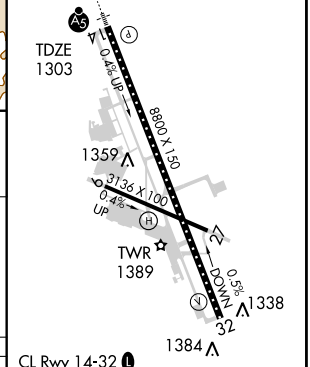
MISSED APPROACH: Climb to 3200 then climbing right turn to 5200 direct FISTA WP and hold.

ATIS	CASCADE APP CON★	MEDFORD TOWER★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95





CATEGORY	A	B	C	D
LNAV MDA	2400/40 1097 (1100-¾)	2400/50 1097 (1100-1)	2400-2½ 1097 (1100-2½)	
CIRCLING	2400-1¼ 1065 (1100-1¼)	2400-1½ 1065 (1100-1½)	2400-3 1065 (1100-3)	



CL Rwy 14-32 L
TDZ/CL Rwy 14 L
REIL Rwy 32 L
MIRL Rwy 9-27
HIRL Rwy 14-32 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OED	APP CRS	Rwy Idg	N/A
113.6	146°	TDZE	N/A
Chan 83		Apt Elev	1335

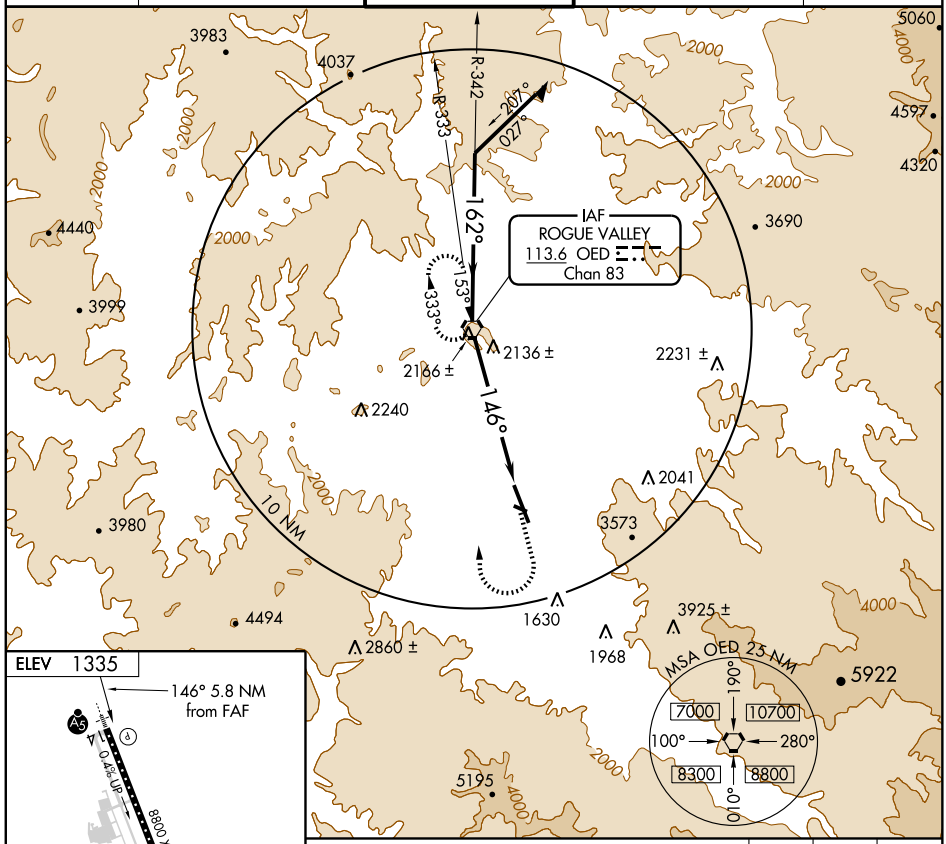
VOR-A

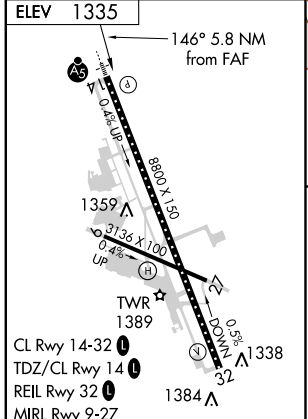
MEDFORD/ ROGUE VALLEY INTL-MEDFORD (MFR)

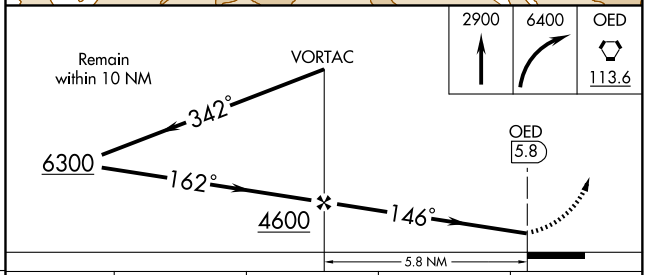
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2900 then climbing right turn to 6400 direct OED VORTAC and hold, continue climb-in-hold to 6400.

ATIS	CASCADE APP CON★	MEDFORD TOWER★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95







FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

CATEGORY	A	B	C	D
CIRCLING	2680-1¼ 1345 (1400-1¼)	2680-1½ 1345 (1400-1½)	2680-3 1345 (1400-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

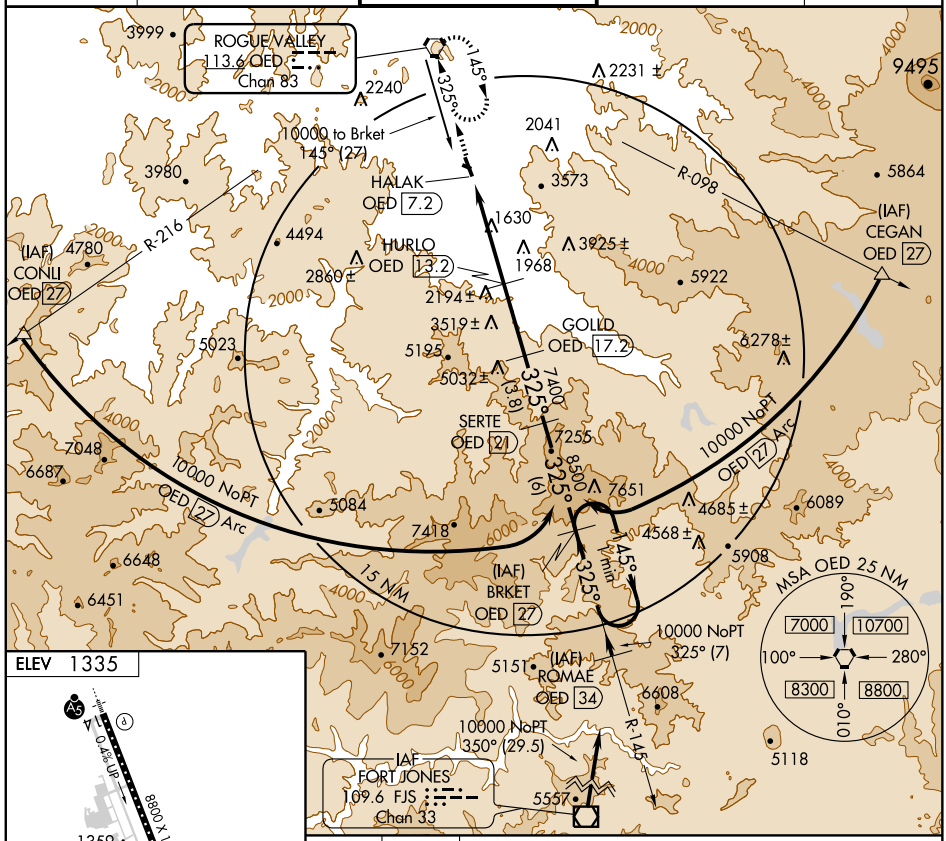
VORTAC OED	APP CRS	Rwy Idg	N/A
113.6	325°	TDZE	N/A
Chan 83		Apt Elev	1335

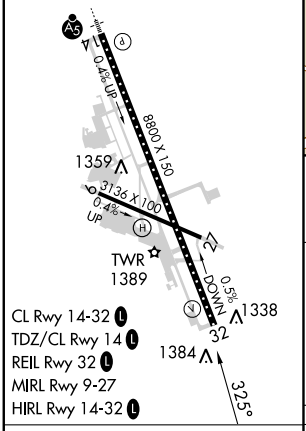
VOR/DME-C

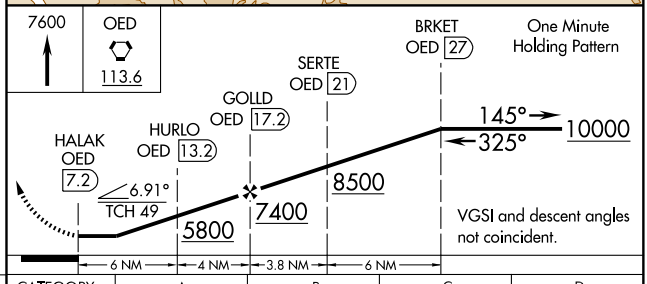
MEDFORD/ ROGUE VALLEY INTL-MEDFORD (MFR)

MISSED APPROACH: Climb to 7600 direct OED VORTAC and hold, continue climb-in-hold to 7600.

ATIS	CASCADE APP CON★	MEDFORD TOWER★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	3600-1¼ 2265 (2300-1¼)	3600-1½ 2265 (2300-1½)	3600-3 2265 (2300-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OED	APP CRS	Rwy Idg	8800
113.6	146°	TDZE	1303
Chan 83		Apt Elev	1335

VOR/DME RWY 14

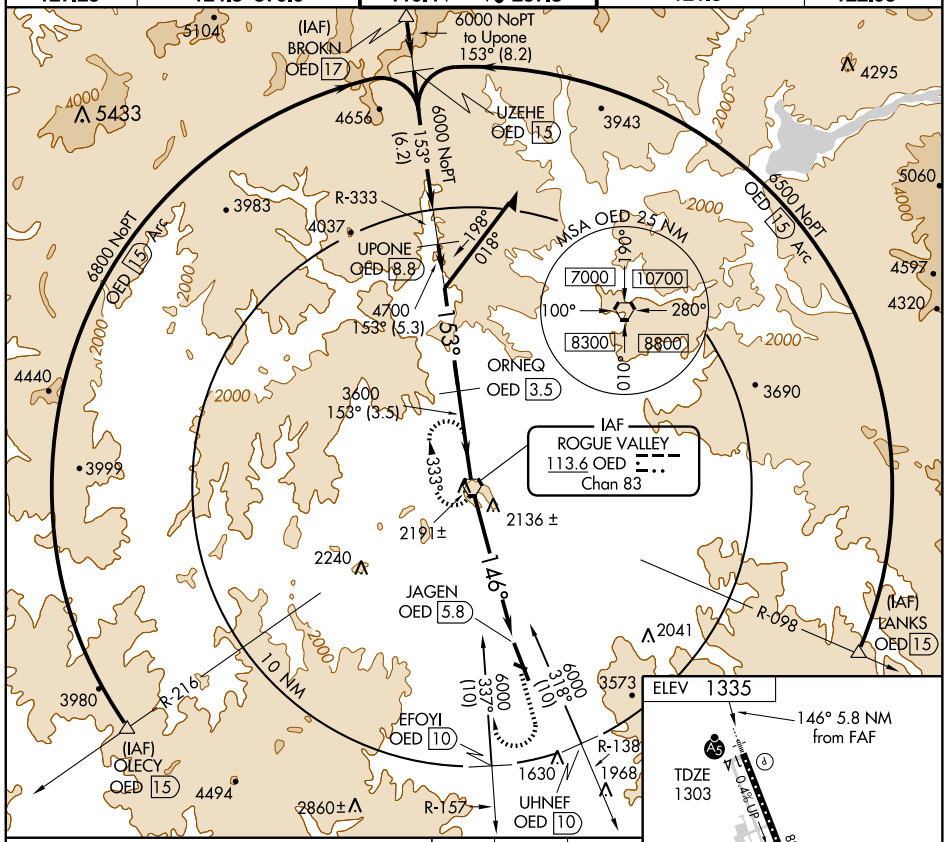
MEDFORD/ROGUE VALLEY INTL-MEDFORD (MFR)

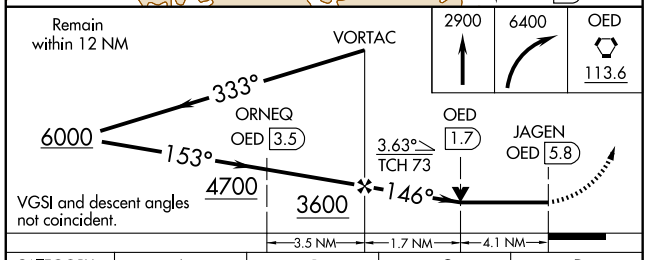
T A Inoperative table does not apply to S-14 CAT A. For inoperative MALSR increase S-14 CAT B visibility to 1½.

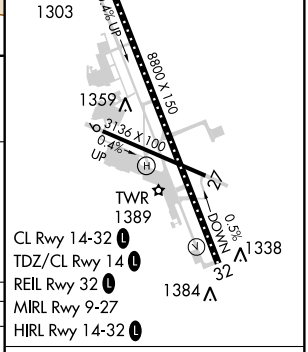
MALSR

MISSED APPROACH: Climb to 2900 then climbing right turn to 6400 direct OED VORTAC and hold, continue climb-in-hold to 6400.

ATIS	CASCADE APP CON ★	MEDFORD TOWER ★	GND CON	UNICOM
127.25	124.3 379.9	119.4 (CTAF) L 257.8	121.8	122.95







CATEGORY	A	B	C	D
S-14	2680/60	1377 (1400-1¼)	2680-2½	1377 (1400-2½)
CIRCLING	2680-1¼ 1345 (1400-1¼)	2680-1½ 1345 (1400-1½)	2680-3	1345 (1400-3)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-ONP	APP CRS	Rwy Idg	5398
111.5	158°	TDZE	151
		Apt Elev	160

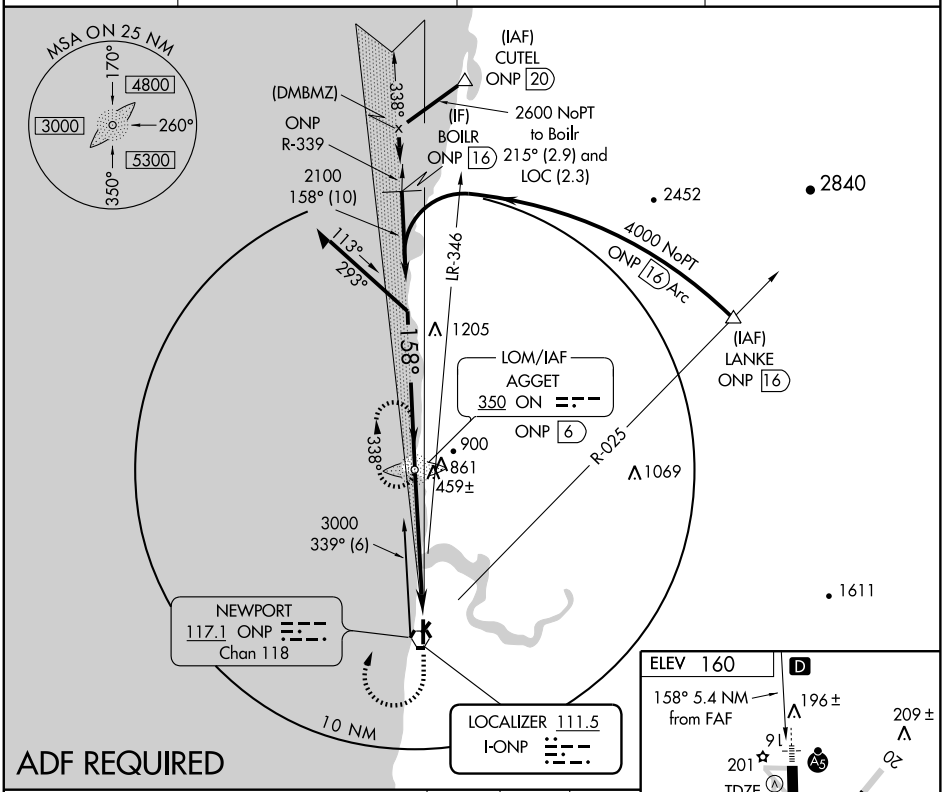
ILS or LOC RWY 16
NEWPORT MUNI (ONP)

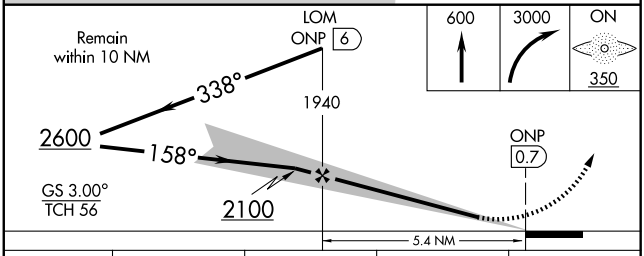
T
A NA

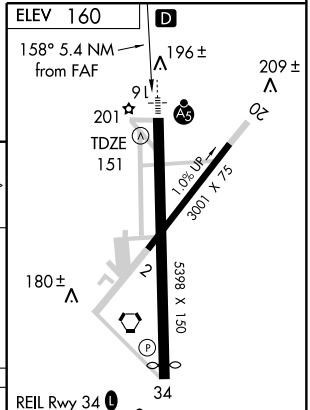
MALSR

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct AGGET LOM/ONP 6 DME and hold.

AWOS-3	SEATTLE CENTER	MCMINNVILLE RADIO	UNICOM
133.9	125.8 291.7	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 16	351-¾ 200 (200-¾)			
S-LOC 16	720-¾ 569 (600-¾)		720-1½ 569 (600-1½)	720-1¾ 569 (600-1¾)
CIRCLING	880-1 720 (800-1)		880-2 720 (800-2)	960-2½ 800 (800-2½)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

NW-1, 14 JAN 2010 to 11 FEB 2010

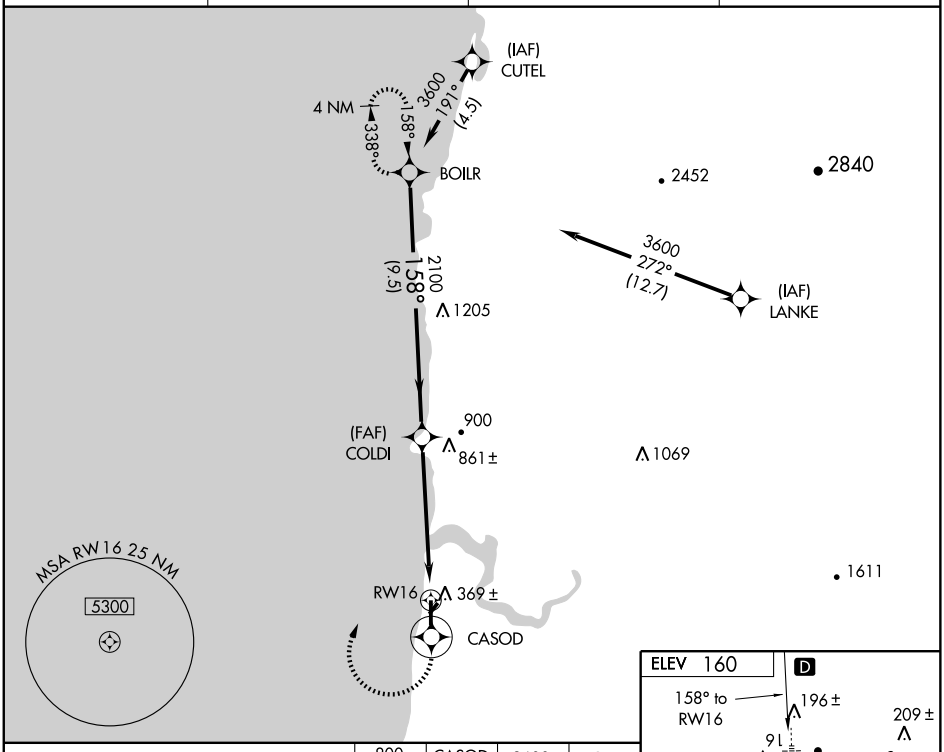
APP CRS	Rwy Idg	5398
158°	TDZE	151
	Apt Elev	160

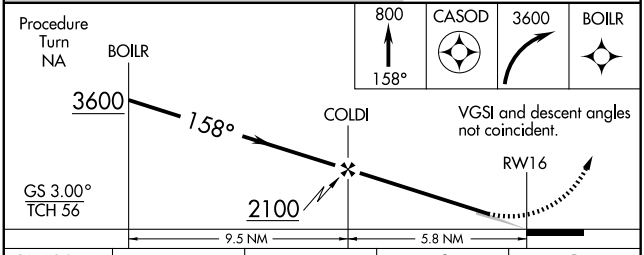
RNAV (GPS) RWY 16

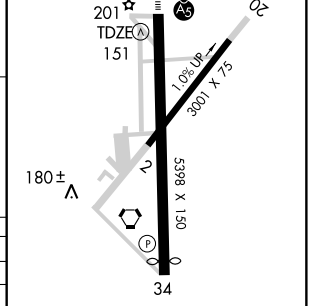
NEWPORT MUNI (ONP)

Inoperative table does not apply to LNAV/VNAV. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F).	MALSR	MISSED APPROACH: Climb to 800 via 158° course to CASOD WP then climbing right to 3600 direct BOILR WP and hold.

AWOS-3	SEATTLE CENTER	MCMINNVILLE RADIO	UNICOM
133.9	125.8 291.7	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	620-1½ 469 (500-1½)			
LNAV MDA	720-¾ 569 (600-¾)		720-1½ 569 (600-1½)	720-1¾ 569 (600-1¾)
CIRCLING	880-1½ 720 (800-1½)		880-2 720 (800-2)	960-2½ 800 (800-2½)

REIL Rwy 34 L
MIRL Rwys 2-20 L
HIRL Rwys 16-34 L

APP CRS	Rwy Idg	5098
328°	TDZE	155
	Apt Elev	160

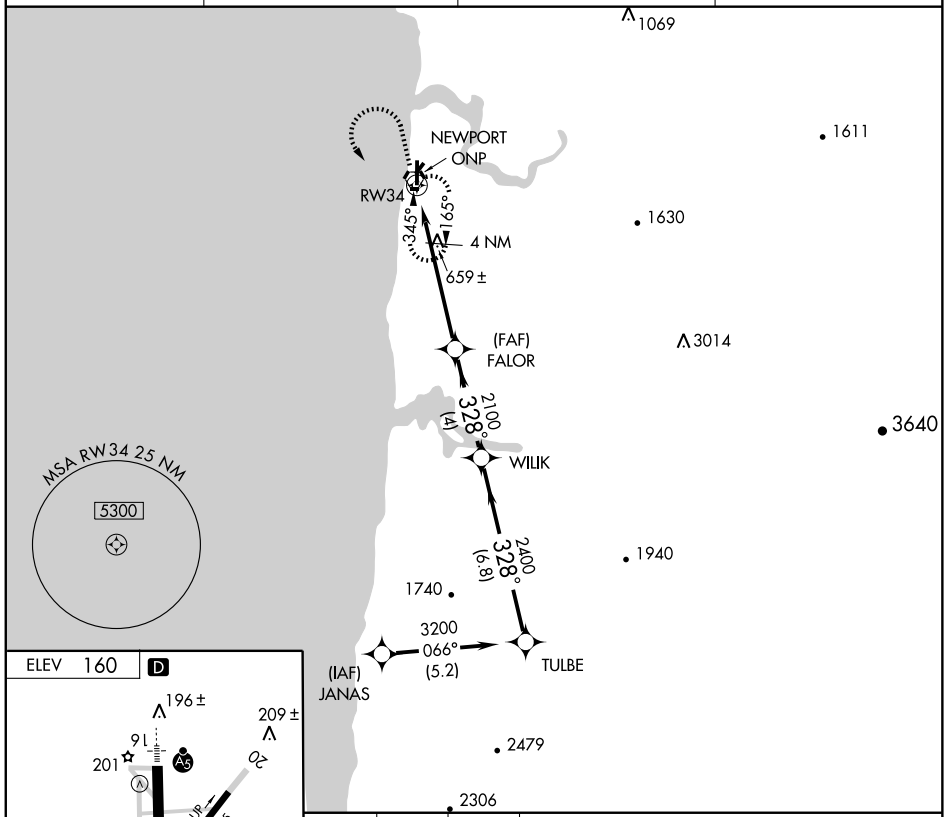
RNAV (GPS) RWY 34
NEWPORT MUNI (ONP)

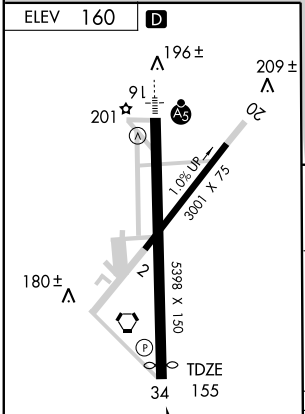
NA

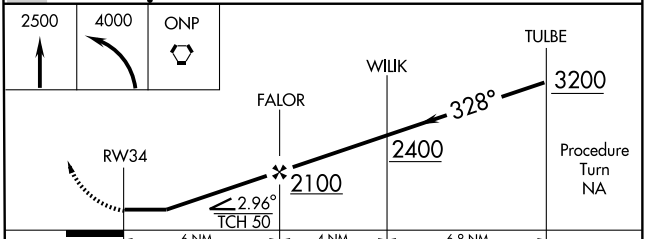
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500, then climbing left turn to 4000 direct ONP VORTAC and hold.

AWOS-3	SEATTLE CENTER	MCMINNVILLE RADIO	UNICOM
133.9	125.8 291.7	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	920-1 765 (800-1)	920-1¼ 765 (800-1¼)	920-2¼ 765 (800-2¼)	920-2½ 765 (800-2½)
CIRCLING	920-1 760 (800-1)	920-1¼ 760 (800-1¼)	920-2¼ 760 (800-2¼)	960-2½ 800 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC ONP	APP CRS	Rwy Idg	N/A
117.1	140°	TDZE	N/A
Chan 118		Apt Elev	160

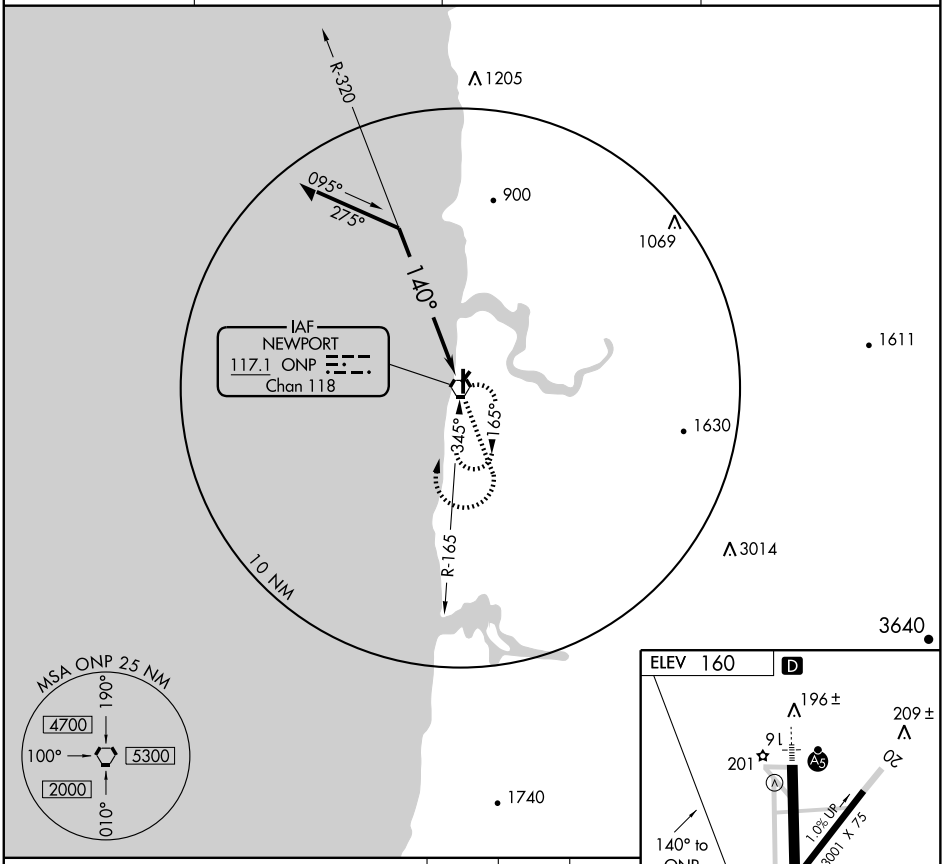
VOR-A

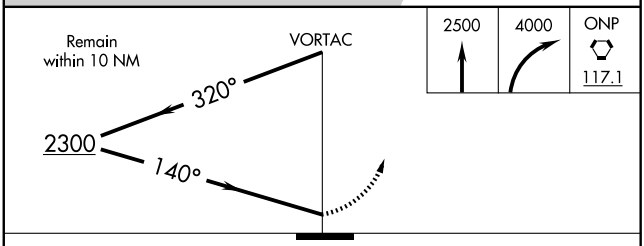
NEWPORT MUNI (ONP)

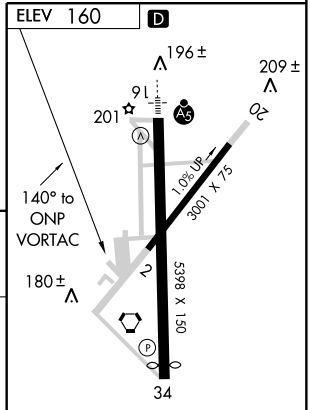
NA

MISSED APPROACH: Climb to 2500, then climbing right turn to 4000, direct ONP VORTAC and hold.

AWOS-3	SEATTLE CENTER	MCMINNVILLE RADIO	UNICOM
133.9	125.8 291.7	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1160-1¼ 1000 (1000-1¼)	1160-1½ 1000 (1000-1½)	1160-3	1000 (1000-3)

REIL Rwy 34 L
MIRL Rwys 2-20 L
HIRL Rwys 16-34 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC ONP	APP CRS	Rwy Idg	5398
117.1	166°	TDZE	151
Chan 118		Apt Elev	160

VOR/DME RWY 16

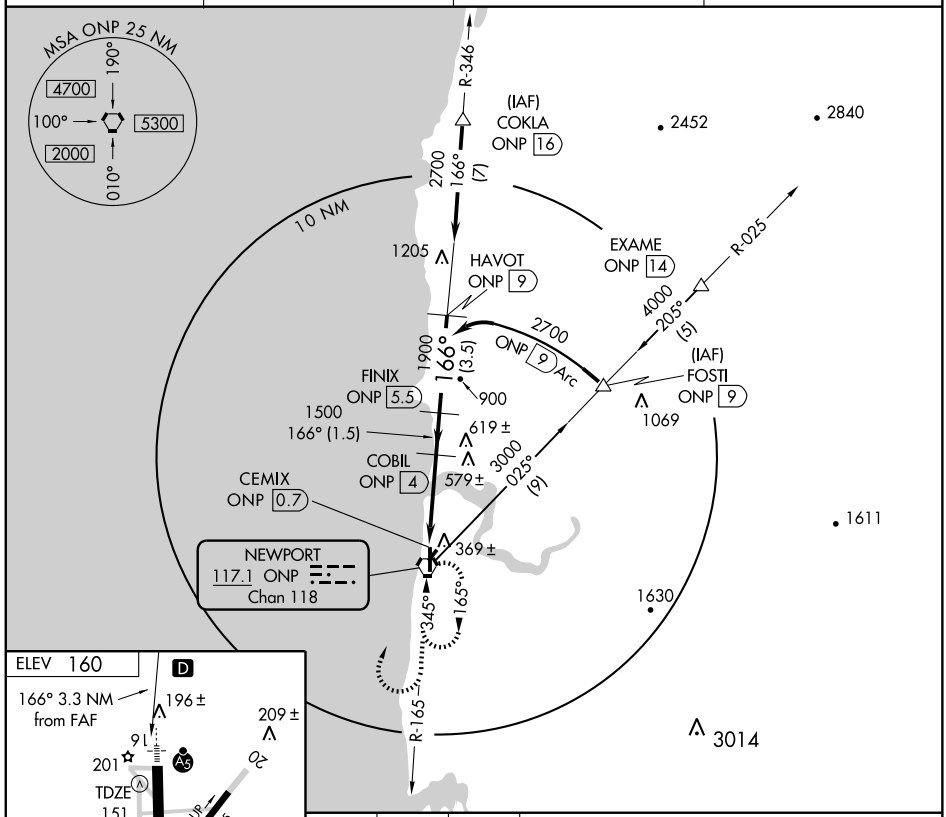
NEWPORT MUNI (ONP)

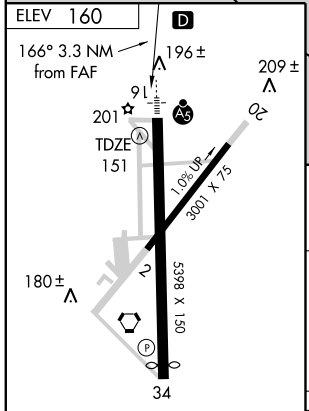
NA Inoperative table does not apply to MALSF Rwy 16.

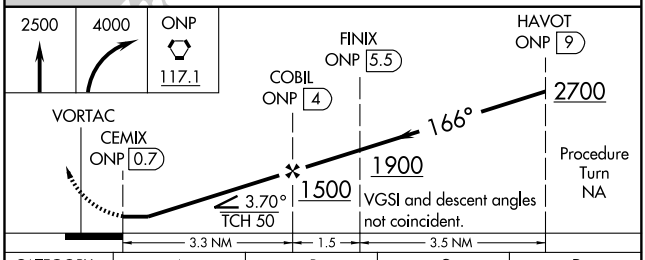
MALSR

MISSED APPROACH: Climb to 2500, then climbing right turn to 4000, direct ONP VORTAC and hold.

AWOS-3	SEATTLE CENTER	MCMINNVILLE RADIO	UNICOM
133.9	125.8 291.7	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-16	640-1 489 (500-1)		640-1¼ 489 (500-1¼)	NA
CIRCLING	880-1 720 (800-1)		880-2 720 (800-2)	960-2½ 800 (800-2½)

REIL Rwy 34 L
MIRL Rwys 2-20 L
HIRL Rwys 16-34 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME RWY 34

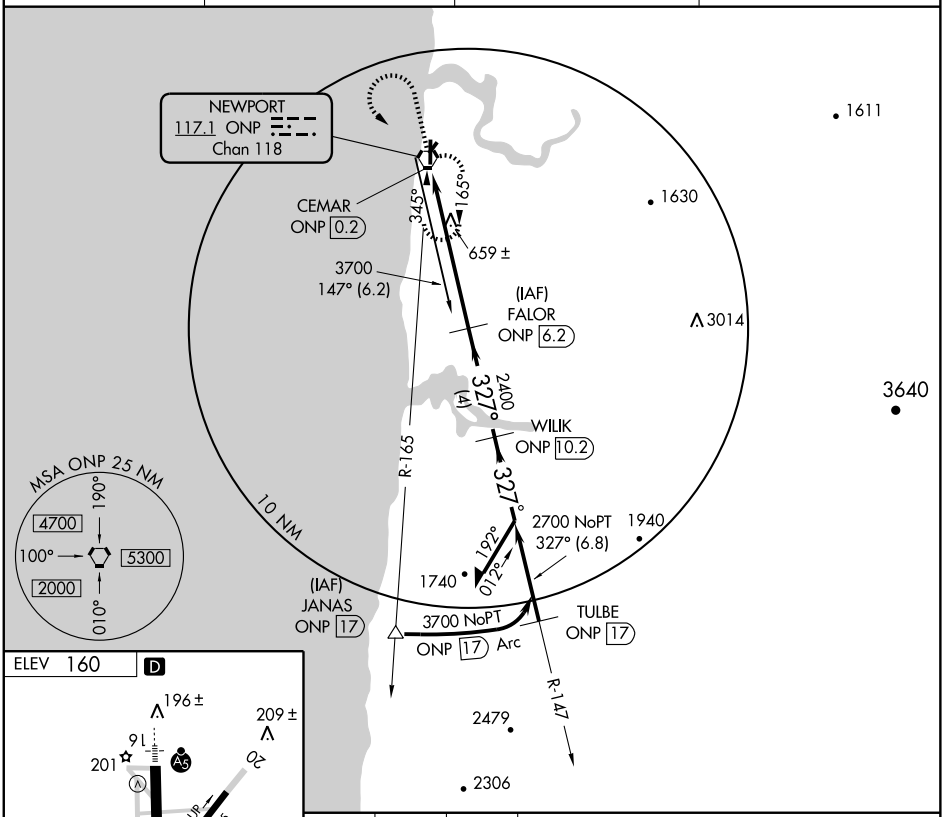
NEWPORT MUNI (ONP)

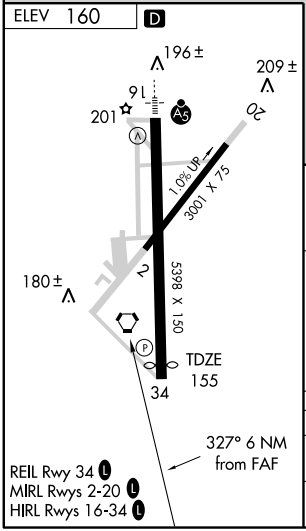
VORTAC ONP 117.1 Chan 118	APP CRS 327°	Rwy Idg 5098 TDZE 155 Apt Elev 160

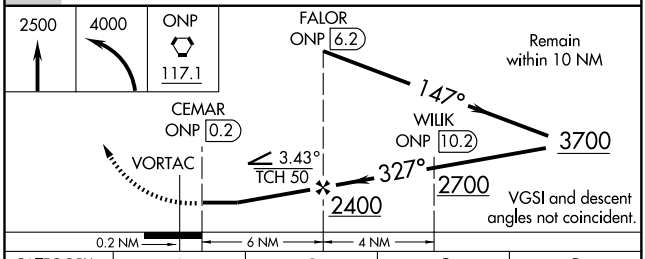
NA

MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 direct ONP VORTAC and hold.

AWOS-3 133.9	SEATTLE CENTER 125.8 291.7	MCMINNVILLE RADIO 122.5	UNICOM 122.8 (CTAF) L







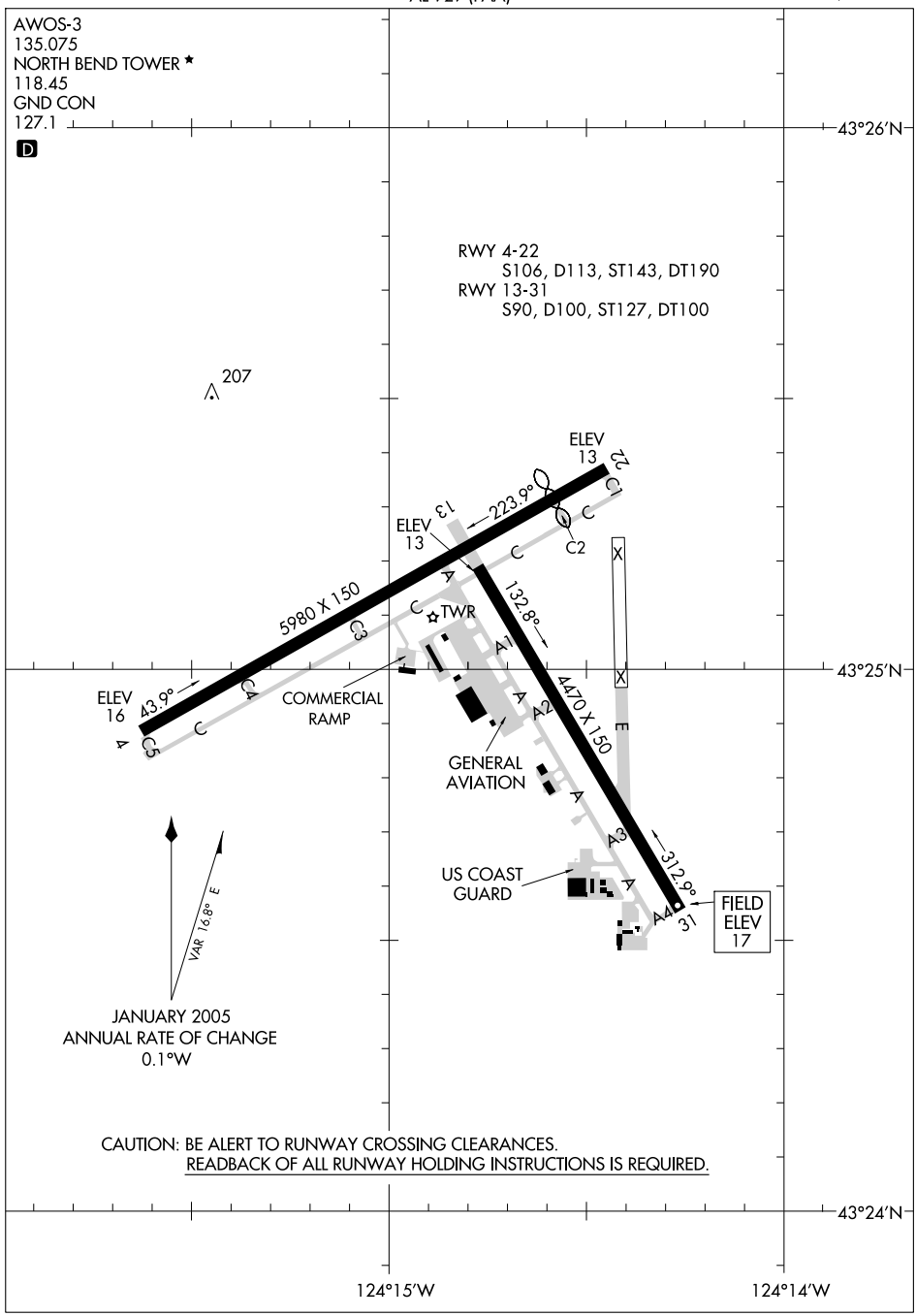
CATEGORY	A	B	C	D
S-34	920-1 765 (800-1)	920-1¼ 765 (800-1¼)	920-2¼ 765 (800-2¼)	920-2½ 765 (800-2½)
CIRCLING	920-1 760 (800-1)	920-1¼ 760 (800-1¼)	920-2¼ 760 (800-2¼)	960-2½ 800 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

09351

AIRPORT DIAGRAM

NORTH BEND/SOUTHWEST OREGON RGNL (OTH)
AL-929 (FAA)
NORTH BEND, OREGON



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-OTH	APP CRS	Rwy Idg	5321
108.5	043°	TDZE	16
		Apt Elev	17

COPTER ILS or LOC RWY 4

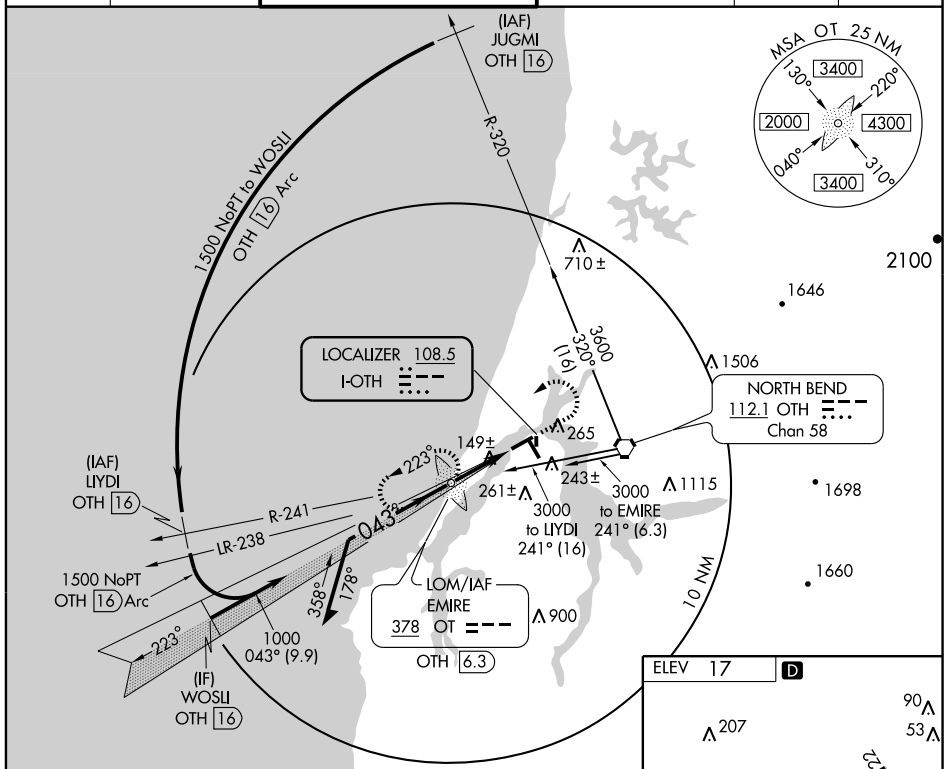
NORTH BEND/SOUTHWEST OREGON RGNL (OTH)

ADF required.
If local altimeter setting not received, procedure NA.
US Coast Guard use only.

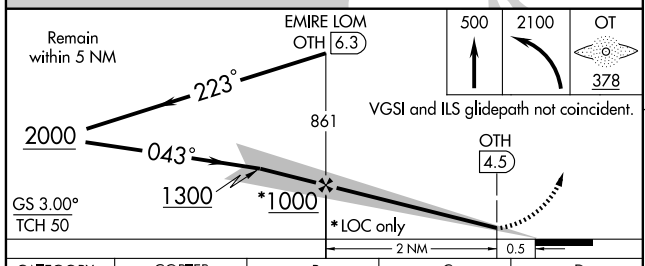
MALSR

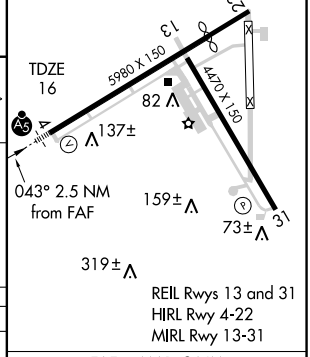
MISSED APPROACH: Climb to 500, then climbing left turn to 2100 direct EMIRE LOM and hold, continue climb-in-hold to 2100.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7



ADF or DME REQUIRED





CATEGORY	COPTER	B	C	D
H-ILS 4	216-½ 200 (200-½)	NA		
H-LOC 4	400-½ 384 (400-½)	NA		

FAF to MAP 2 NM					
Knots	45	60	75	90	105
Min:Sec	2:40	2:00	1:36	1:20	1:09

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-OTH	APP CRS	Rwy Idg	5321
108.5	043°	TDZE	16
		Apt Elev	17

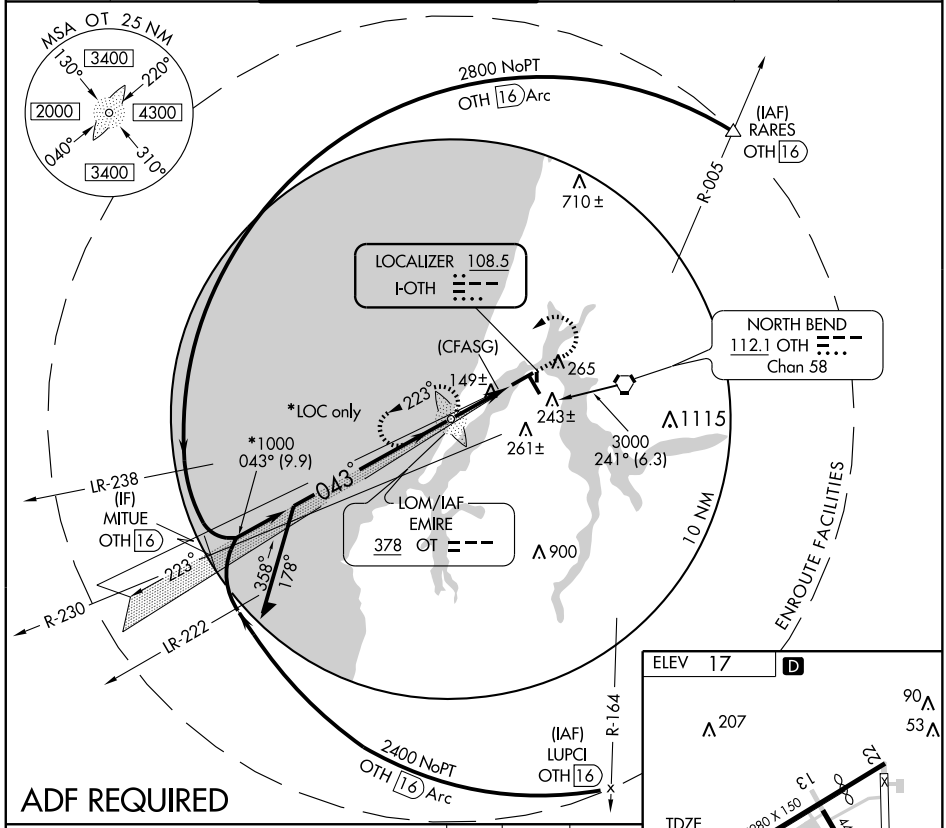
ILS or LOC RWY 4

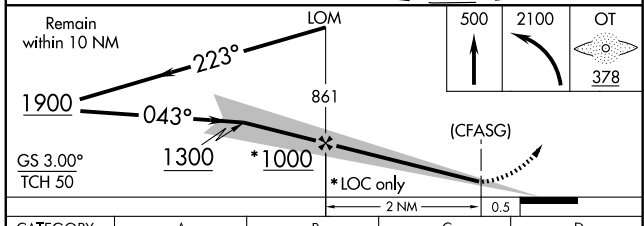
NORTH BEND/ SOUTHWEST OREGON RGNL (OTH)

MALSR

MISSED APPROACH: Climb to 500, then climbing left turn to 2100 direct EMIRE LOM and hold, continue climb-in-hold to 2100.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7





CATEGORY	A	B	C	D
S-ILS 4	216-¾ 200 (200-¾)			
S-LOC 4	400-1 384 (400-1)			400-1¼ 384 (400-1¼)
CIRCLING	740-1 723 (800-1)		820-2¼ 803 (900-2¼)	1000-3 983 (1000-3)

FAF to MAP 2 NM

Knots	60	90	120	150	180
Min:Sec	2:00	1:20	1:00	0:48	0:40

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM OT	APP CRS	Rwy Idg	5321
378	043°	TDZE	16
		Apt Elev	17

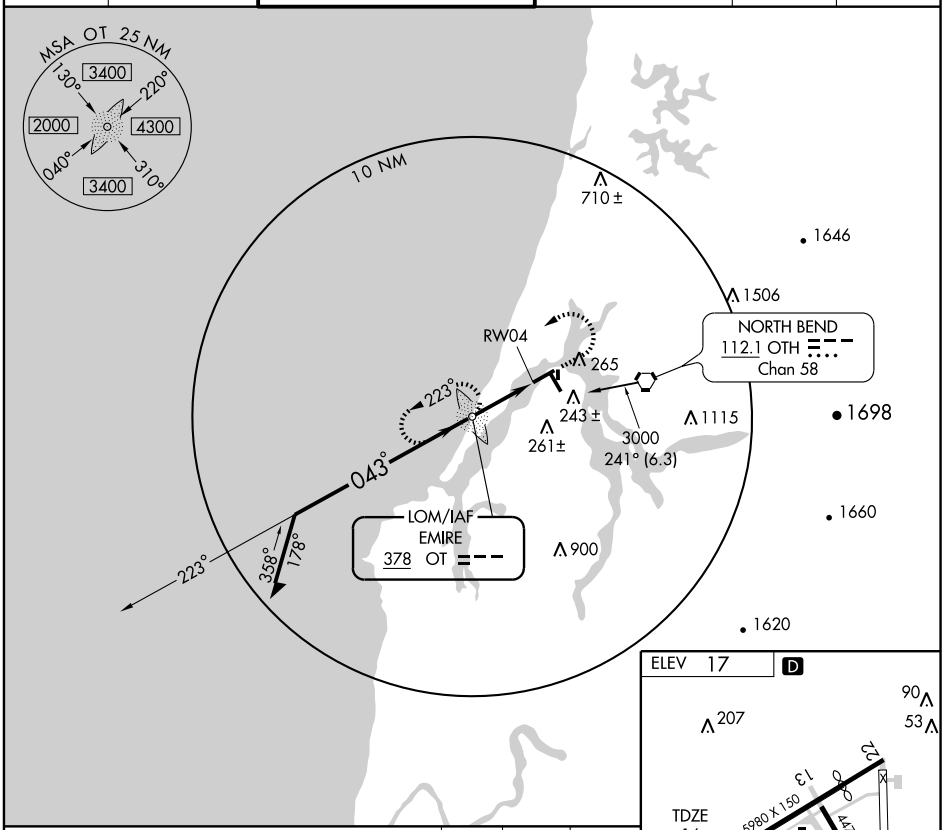
NDB or GPS RWY 4

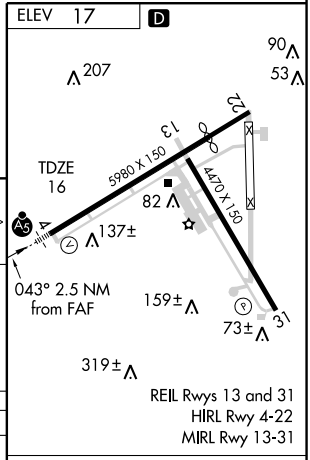
NORTH BEND/ SOUTHWEST OREGON RGNL (OTH)

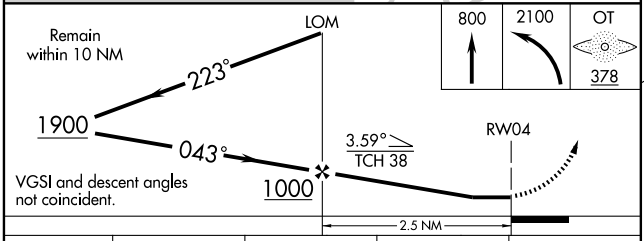
MALSR

MISSED APPROACH: Climb to 800, then climbing left turn to 2100 direct EMIRE (OT) LOM and hold, continue climb-in-hold to 2100.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7







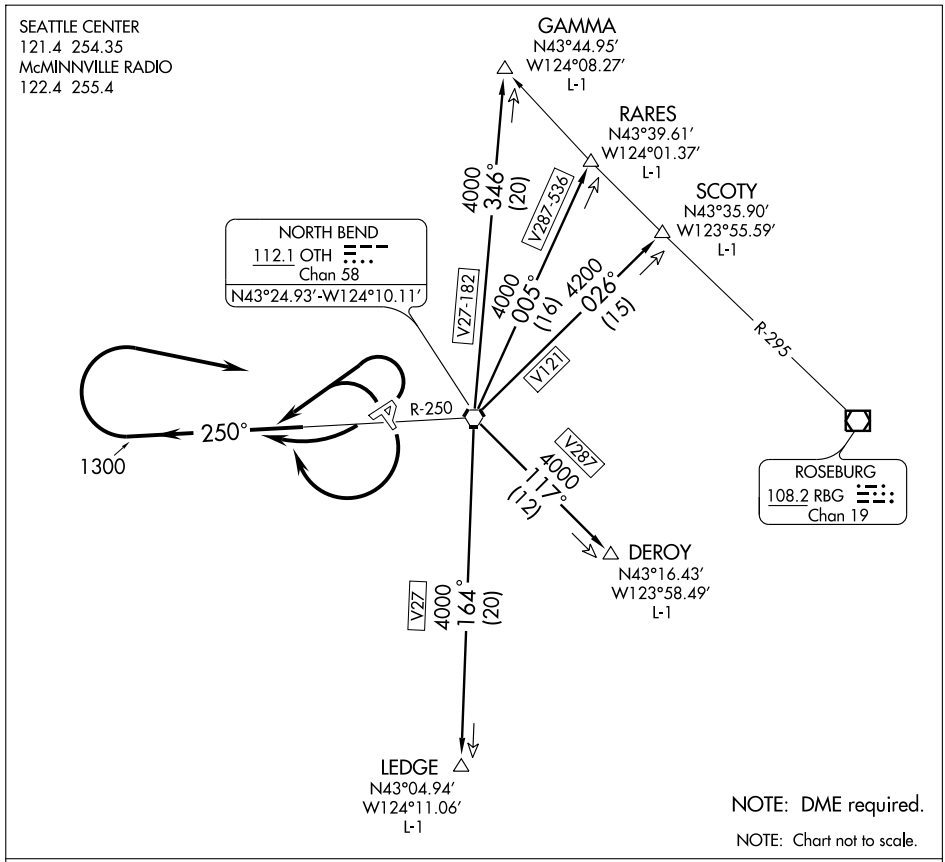
CATEGORY	A	B	C	D
S-4	660-1 644 (700-1)		660-1¾ 644 (700-1¾)	660-2 644 (700-2)
CIRCLING	740-1 723 (800-1)	740-1¼ 723 (800-1¼)	820-2¼ 803 (900-2¼)	1000-3 983 (1000-3)

FAF to MAP 2.5 NM

Knots	60	90	120	150	180
Min:Sec	2:30	1:40	1:15	1:00	0:50

NW-1, 14 JAN 2010 to 11 FEB 2010

NORTH BEND FOUR DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 31 and 34: Turn left. Thence....

TAKE-OFF RUNWAYS 13, 16 and 22: Turn right. Thence....

....All aircraft climb via OTH R-250 to 1300, then climbing right turn direct OTH VORTAC. Thence via (transition).

DEROY TRANSITION (OTH4.DEROY): From over OTH VORTAC via OTH R-117 to DEROY DME FIX.

GAMMA TRANSITION (OTH4.GAMMA): From over OTH VORTAC via OTH R-346 to GAMMA INT.

LEDGE TRANSITION (OTH4.LEDGE): From over OTH VORTAC via OTH R-164 to LEDGE DME FIX.

RARES TRANSITION (OTH4.RARES): From over OTH VORTAC via OTH R-005 to RARES INT.

SCOTY TRANSITION (OTH4.SCOTY): From over OTH VORTAC via OTH R-026 to SCOTY INT.

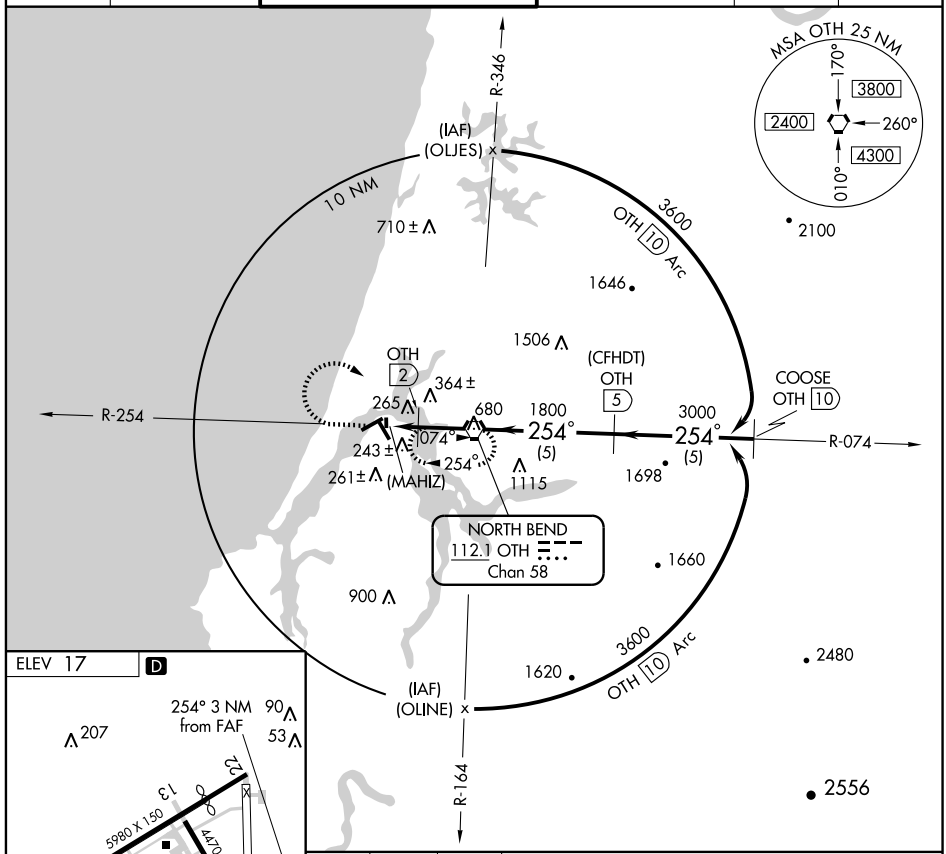
VORTAC OTH	APP CRS	Rwy Idg	N/A
112.1	254°	TDZE	N/A
Chan 58		Apt Elev	17

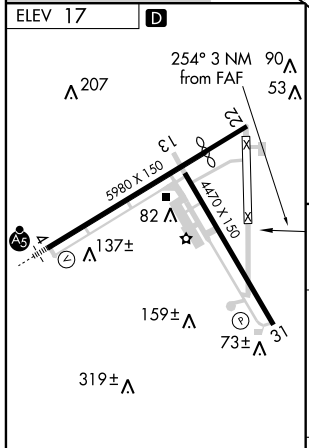
VOR/DME or GPS-B

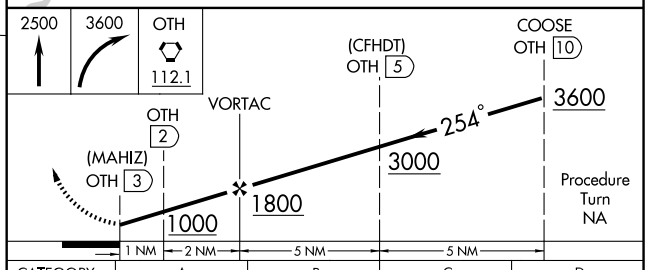
NORTH BEND/ SOUTHWEST OREGON RGNL (OTH)

MISSED APPROACH: Climb to 2500, then climbing right turn to 3600 direct OTH VORTAC and hold.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7







CATEGORY	A	B	C	D
CIRCLING	720-1 706 (800-1)	760-1¼ 746 (800-1¼)	820-2¼ 806 (900-2¼)	1000-3 986 (1000-3)

REIL Rwys 13 and 31
HIRL Rwy 4-22
MIRL Rwy 13-31

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OTH	APP CRS	Rwy Idg	5321
112.1	070°	TDZE	12
Chan 58		Apt Elev	17

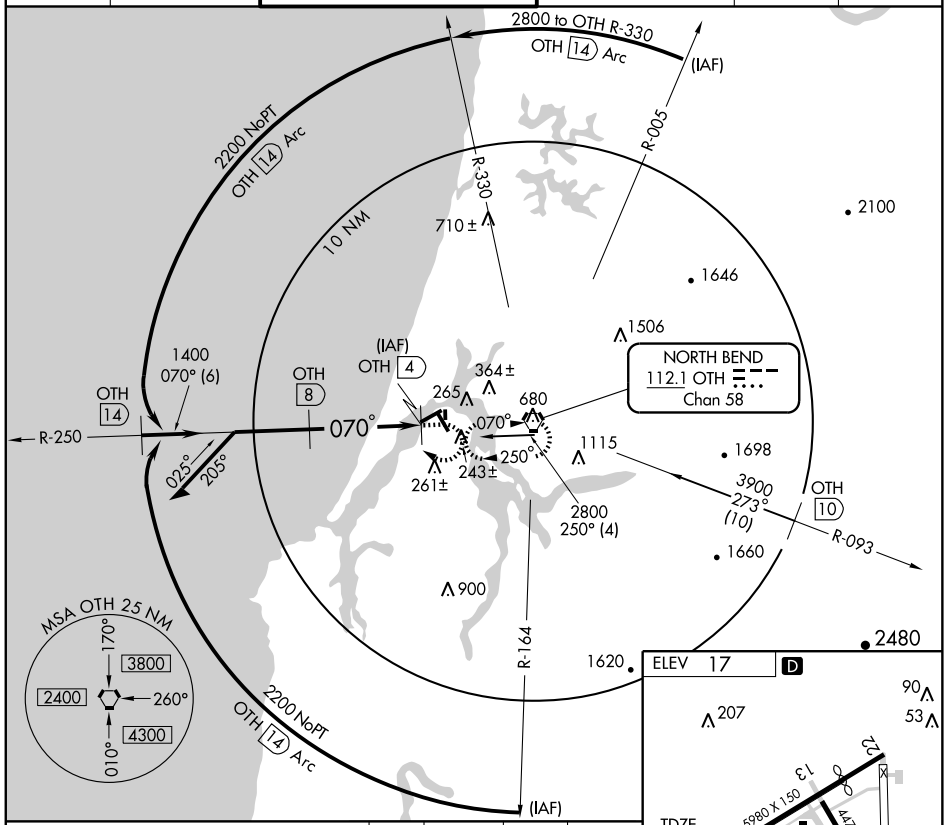
VOR/DME RWY 4

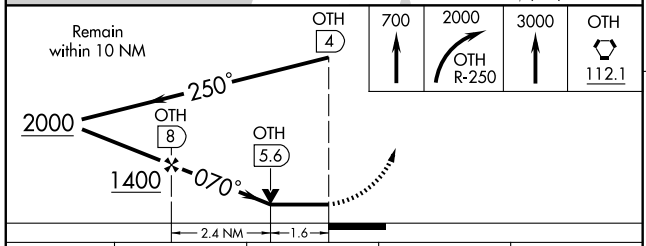
NORTH BEND/SOUTHWEST OREGON RGNL (OTH)

MALSR

MISSED APPROACH: Climb to 700, then climbing right turn to 2000 via OTH R-250; then climb to 3000 direct OTH VORTAC and hold.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7





CATEGORY	A	B	C	D
S-4	540-1 528 (600-1)		540-1½ 528 (600-1½)	540-1¾ 528 (600-1¾)
CIRCLING	720-1 706 (800-1)	760-1¼ 746 (800-1¼)	820-2¼ 806 (900-2¼)	1000-3 986 (1000-3)

REIL Rwys 13 and 31
HIRL Rwy 4-22
MIRL Rwy 13-31

NW-1, 14 JAN 2010 to 11 FEB 2010

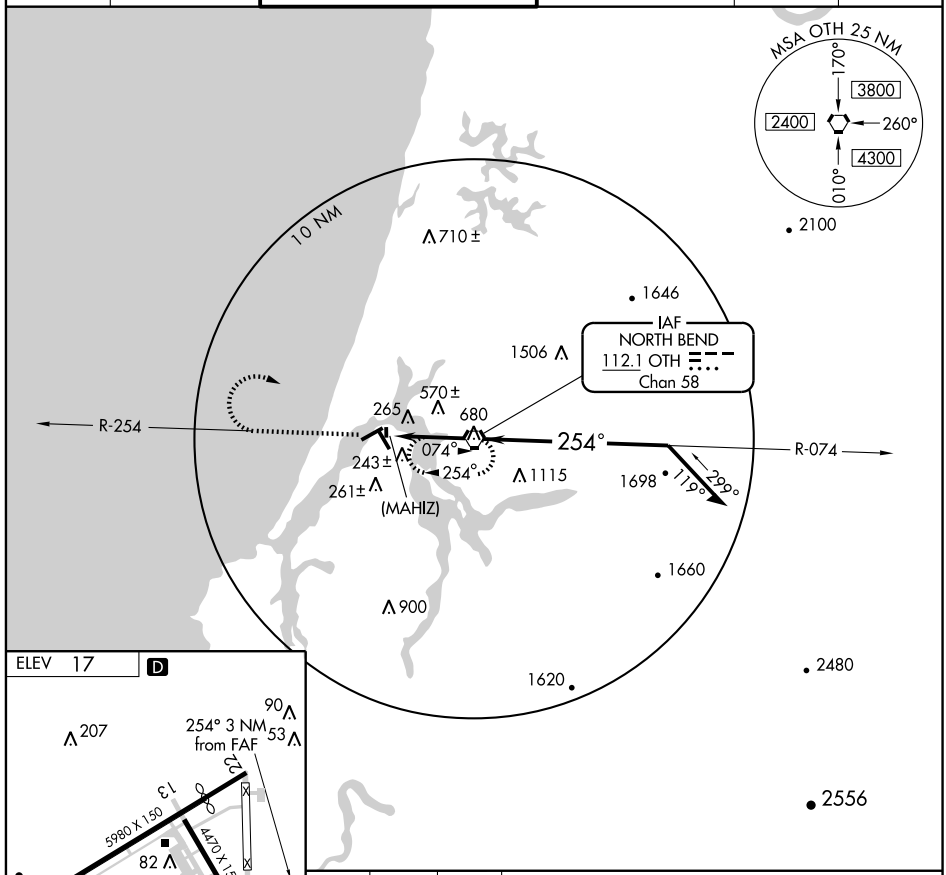
VORTAC OTH	APP CRS	Rwy Idg	N/A
112.1	254°	TDZE	N/A
Chan 58		Apt Elev	17

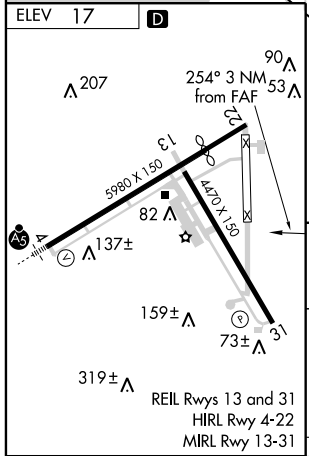
VOR or GPS-A

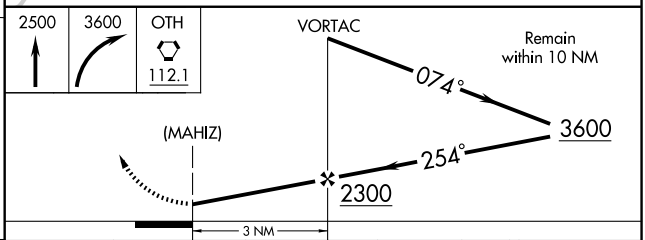
NORTH BEND/ SOUTHWEST OREGON RGNL (OTH)

MISSED APPROACH: Climb to 2500, then climbing right turn to 3600 direct OTH VORTAC and hold.

AWOS-3	SEATTLE CENTER	SOUTHWEST REGIONAL TOWER ★	MC MINNVILLE RADIO	GND CON	UNICOM
135.075	121.4 254.35	118.45 (CTAF) L	122.4 255.4	127.1	122.7







FAF to MAP 3 NM					
Knots	60	90	120	150	180
Min:Sec	3:00	2:00	1:30	1:12	1:00

CATEGORY	A	B	C	D
CIRCLING	1100-1¼ 1086 (1100-1¼)	1100-1½ 1086 (1100-1½)	1100-3	1086 (1100-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

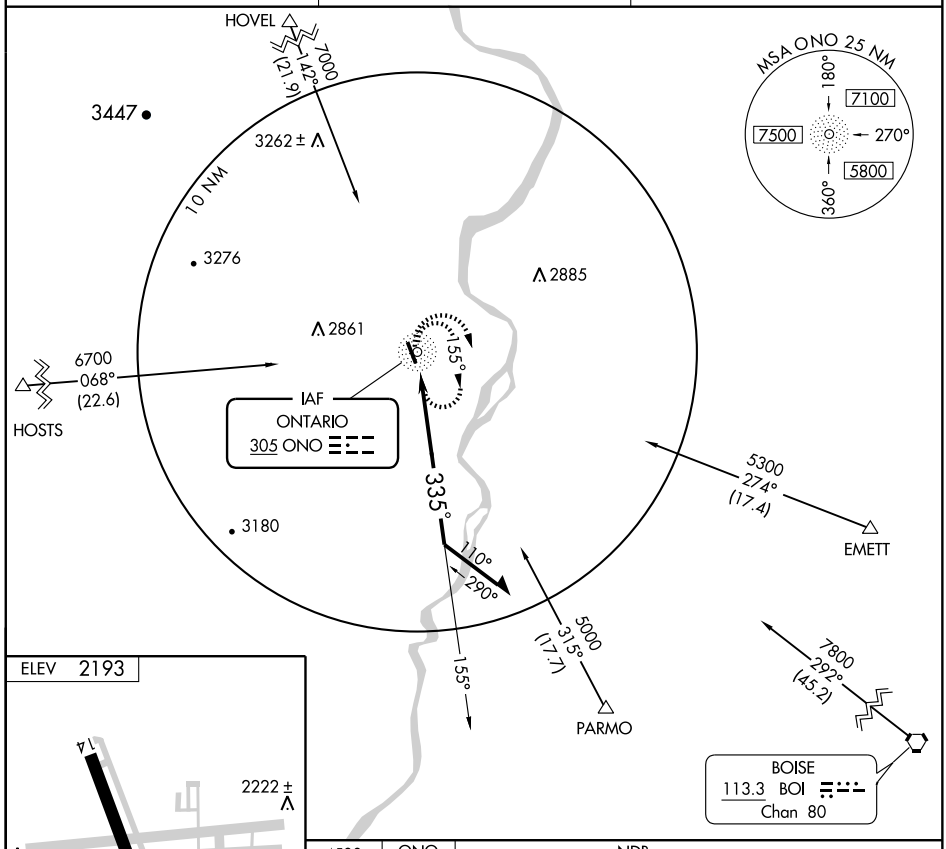
NDB ONO 305	APP CRS 335°	Rwy Idg 5011 TDZE 2193 Apt Elev 2193

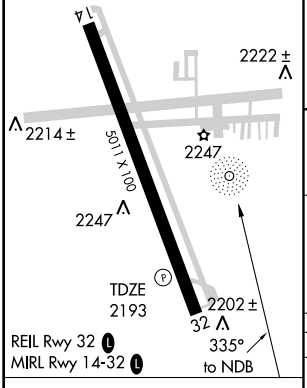
NDB RWY 32
ONTARIO MUNI (ONO)

Visibility reduction by helicopters NA.
When local altimeter setting not received, use Caldwell altimeter setting and increase MDA 100 feet.

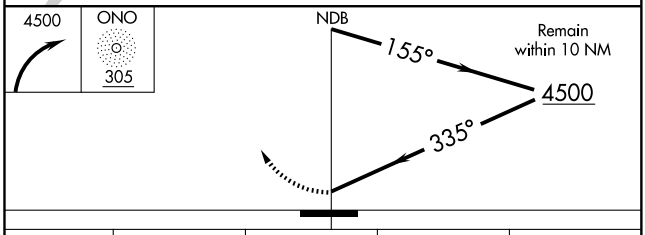
MISSED APPROACH: Climbing right turn to 4500 in ONO NDB holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.275	128.05 387.15	122.8 (CTAF) L





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-32	3160-1¼ 967 (1000-1¼)	3160-1½ 967 (1000-1½)	3160-3 967 (1000-3)	
CIRCLING	3160-1¼ 967 (1000-1¼)	3160-1½ 967 (1000-1½)	3160-3 967 (1000-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

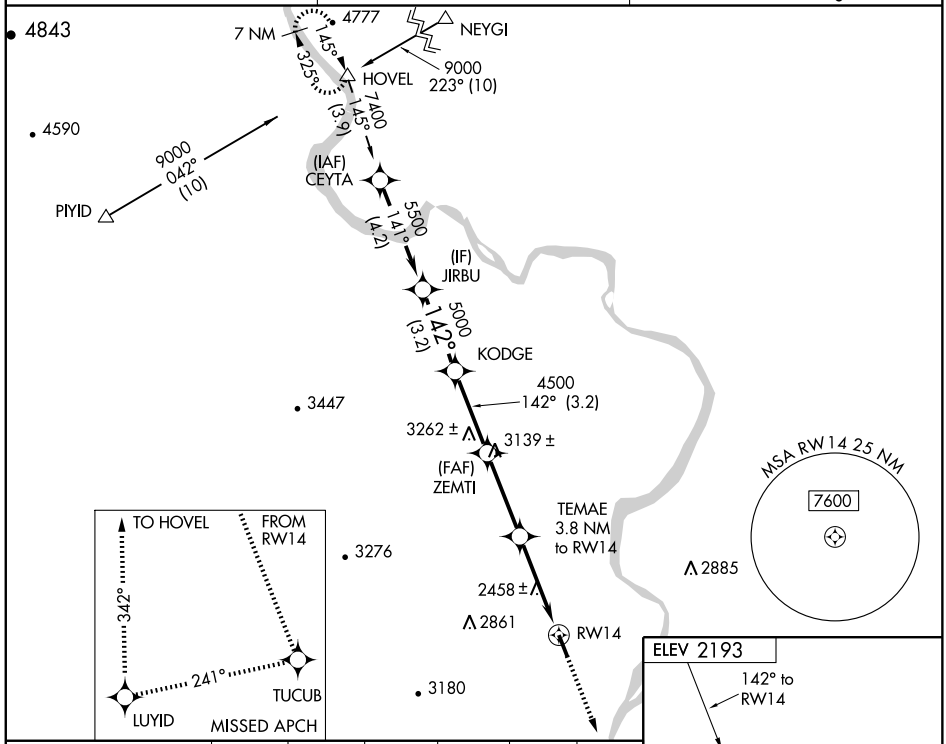
WAAS	APP CRS	Rwy Idg	5011
CH 78207	142°	TDZE	2193
W14A		Apt Elev	2193

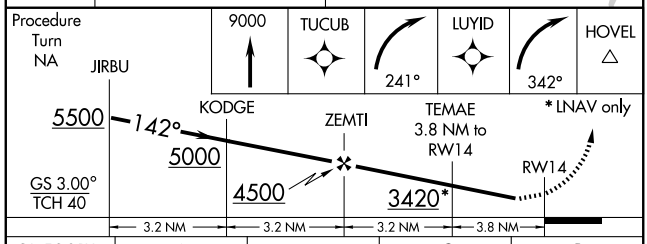
RNAV (GPS) RWY 14
ONTARIO MUNI (ONO)

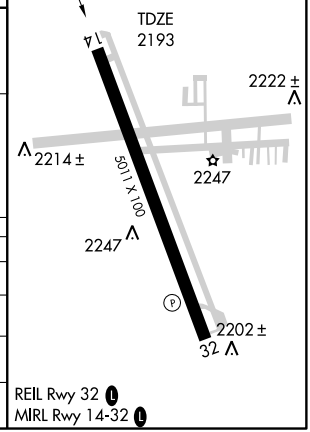
Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 45°C (113°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Caldwell altimeter setting and increase DA/MDA 100 feet, and increase LPV visibility ¼ mile all Cats, LNAV/VNAV visibility ½ mile all Cats, LNAV Cat C and D ¼ mile, Circling Cat C ¼ mile.

MISSED APPROACH: Climb to 9000 direct TUCUB and right turn via 241° track to LUYID and right turn via 342° track to HOVEL and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.275	128.05 387.15	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2744-2 551 (600-2)			
LNAV/VNAV DA	2781-2 588 (600-2)			
LNAV MDA	2720-1 527 (600-1)		2720-1½ 527 (600-1½)	2720-1¾ 527 (600-1¾)
CIRCLING	2720-1 527 (600-1)	2760-1 567 (600-1)	2760-1½ 567 (600-1½)	2760-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

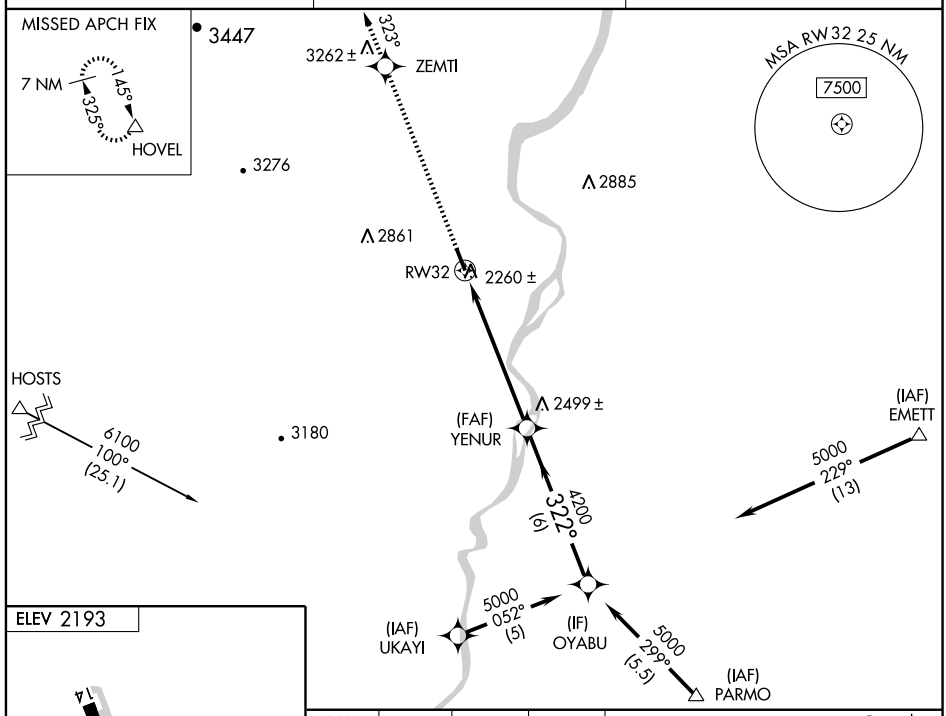
WAAS	APP CRS	Rwy Idg	5011
CH 87007	322°	TDZE	2193
W32A		Apt Elev	2193

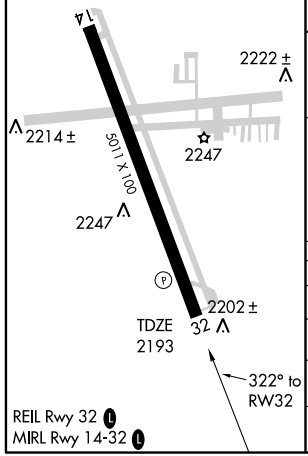
RNAV (GPS) RWY 32
ONTARIO MUNI (ONO)

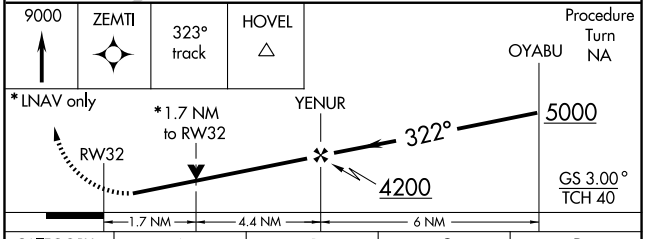
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). Baro-VNAV and VDP NA when using Caldwell altimeter setting. DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Caldwell altimeter setting and increase DA/MDA 100 feet, and increase LPV and LNAV/VNAV visibility ¼ mile all Cats, LNAV Cat C and D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 9000 direct ZEMTI and via 323° track to HOVEL and hold, continue climb-in-hold to 9000.

ASOS	SALT LAKE CENTER	UNICOM
135.275	128.05 387.15	122.8 (CTAF) L

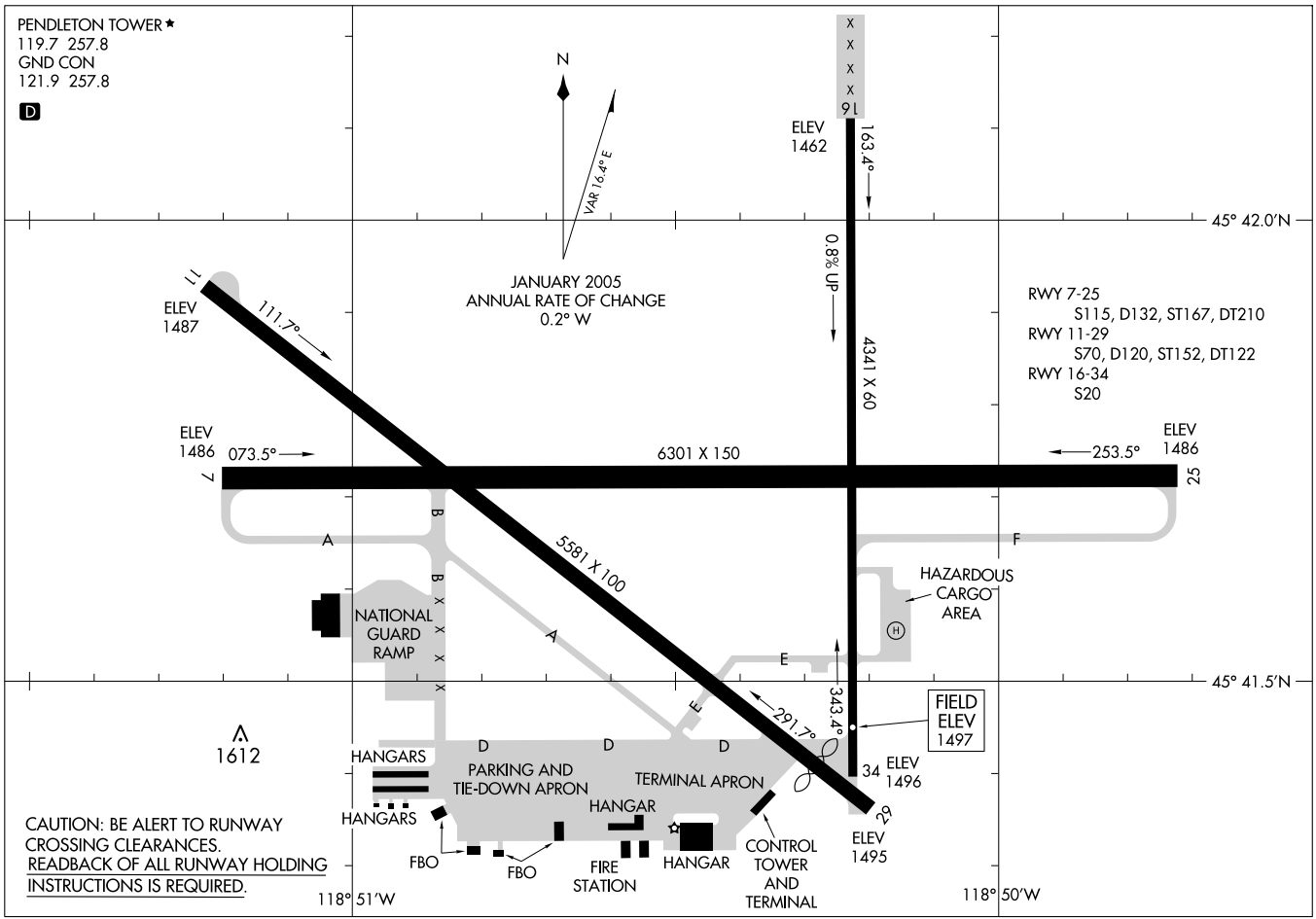






CATEGORY	A	B	C	D
LPV DA		2443-1	250 (300-1)	
LNAV/VNAV DA		2510-1¼	317 (400-1¼)	
LNAV MDA	2760-1 567 (600-1)		2760-1½ 567 (600-1½)	2760-1¾ 567 (600-1¾)
CIRCLING	2760-1 567 (600-1)		2760-1½ 567 (600-1½)	2760-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010



AIRPORT DIAGRAM

PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)
AL-316 (FAA)
PENDLETON, OREGON

LOC I-PDT	APP CRS	Rwy Idg	6301
110.3	254°	TDZE	1487
		Apt Elev	1497

ILS or LOC/DME RWY 25

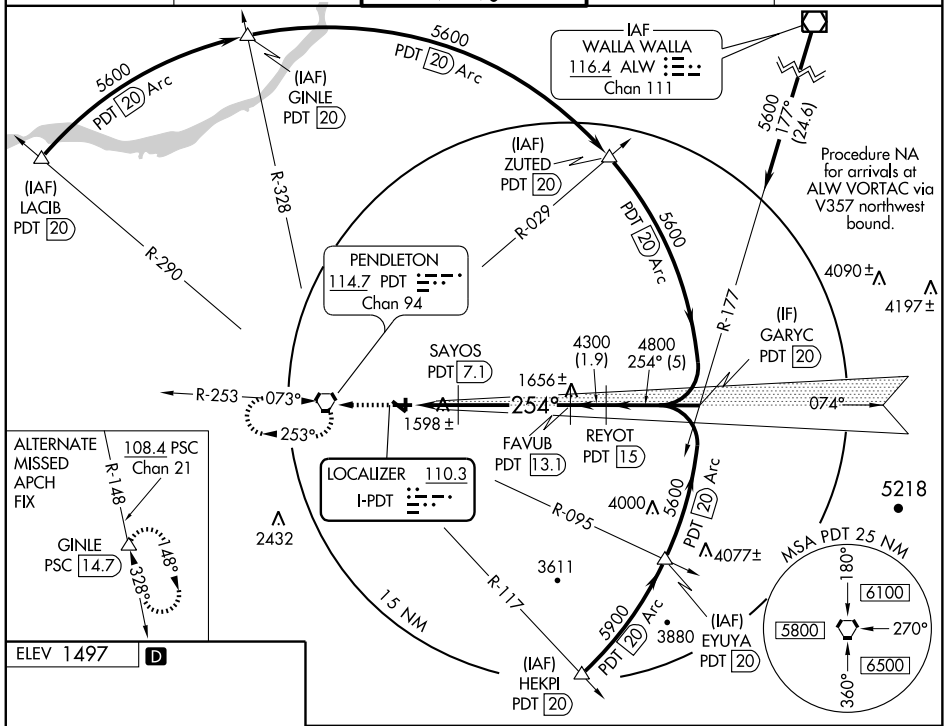
PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)

T DME from PDT VORTAC. Simultaneous reception of I-PDT and PDT VORTAC DME required.
A When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet, and S-LOC 25 Cat C/D visibility ¼ mile.
For inoperative MALSR when using Walla Walla altimeter setting increase S-ILS 25 visibility all Cats to 1 mile.
** RVR 1800 authorized with the use of FD or AP or HUD to DA, NA when using Walla Walla altimeter seting.

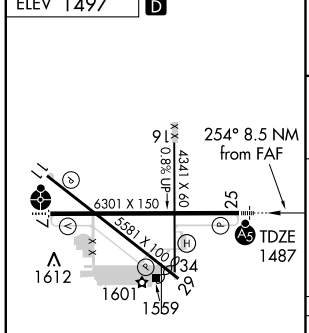
MALSR

MISSED APPROACH: Climb to 4000 direct PDT VORTAC and hold, continue climb-in-hold to 4000.

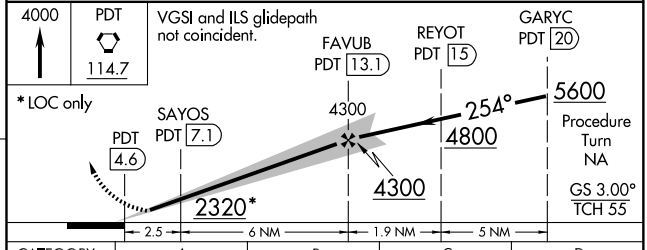
ASOS	CHINOOK APP CON ★	PENDLETON TOWER ★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95



ELEV 1497 D



REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L



CATEGORY	A	B	C	D
S-ILS 25	**1687/24 200 (200-½)			
S-LOC 25	1860/24 373 (400-½)			1860/40 373 (400-¾)
CIRCLING	1920-1 423 (500-1)	1960-1 463 (500-1)	1960-1½ 463 (500-1½)	2060-2 563 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 73012 W07A	APP CRS 074°	Rwy Idg 6301 TDZE 1486 Apt Elev 1497

RNAV (GPS) RWY 7

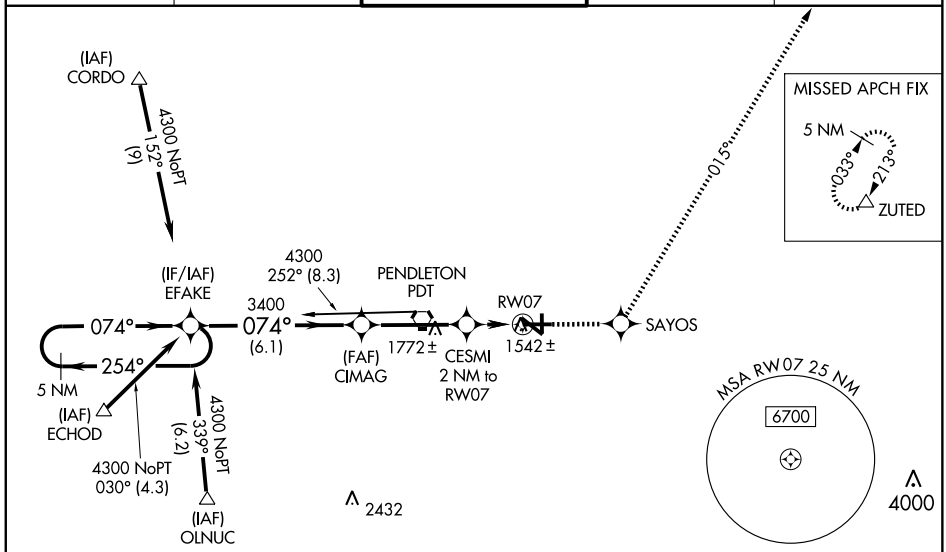
PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)

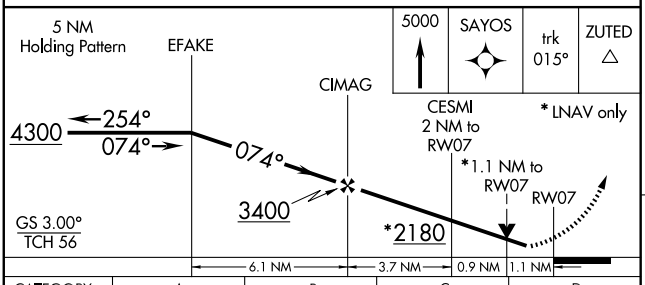
T Inoperative table does not apply to LNAV/VNAV all Cats.
A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
VDP and Baro-VNAV NA when using Walla Walla altimeter setting. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet, and all visibilities ¾ mile. Inoperative table does not apply.

ODALS

MISSED APPROACH: Climb to 5000 direct SAYOS and via track 015° to ZUTED and hold.

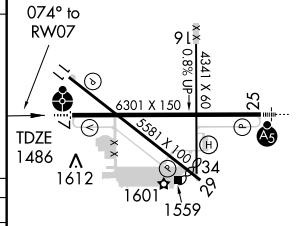
ASOS	CHINOOK APP CON ★	PENDLETON TOWER ★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95





CATEGORY	A	B	C	D
LPV DA	1736-¾ 250 (300-¾)			
LNAV/VNAV DA	1834-1¼ 348 (400-1¼)			
LNAV MDA	1880-¾ 394 (400-¾)			1880-1¼ 394 (400-1¼)
CIRCLING	1920-1 423 (500-1)	1960-1 463 (500-1)	1960-1½ 463 (500-1½)	2060-2 563 (600-2)

ELEV 1497 D



REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 82712 W11A	APP CRS 112°	Rwy Idg 5581 TDZE 1487 Apt Elev 1497

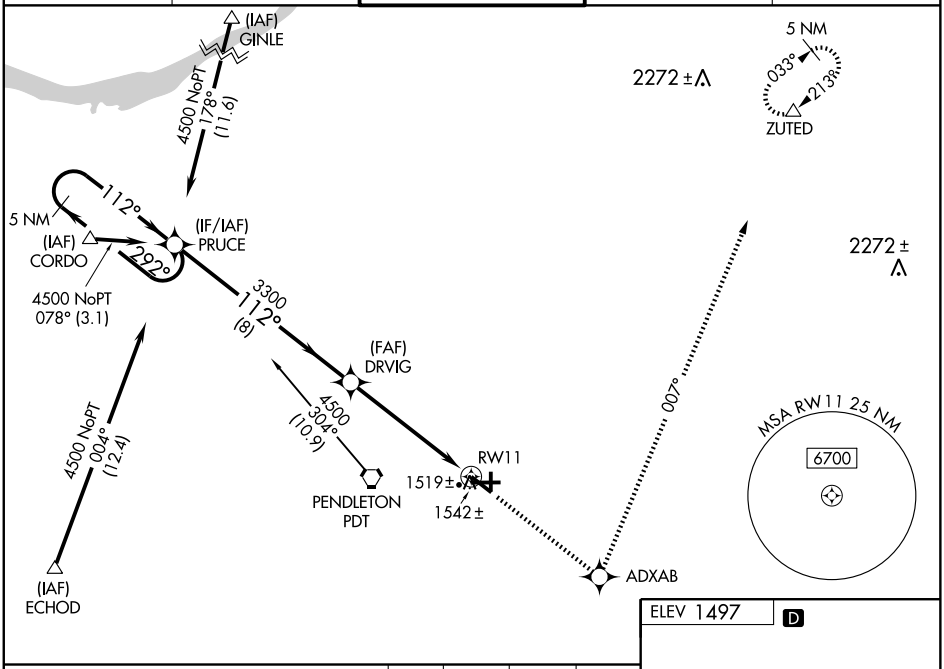
RNAV (GPS) RWY 11

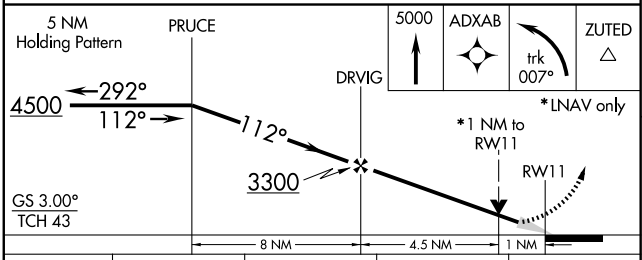
PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Walla Walla altimeter setting: increase all DA/MDA 120 feet and visibility LPV all Cats ¼ mile, LNAV/VNAV all Cats ½ mile, LNAV Cats C and D ¼ mile and Circling Cat D ¼ mile.
VDP and Baro-VNAV NA when using Walla Walla altimeter setting.

MISSED APPROACH: Climb to 5000 direct ADXAB and left turn via track 007° to ZUTED and hold.

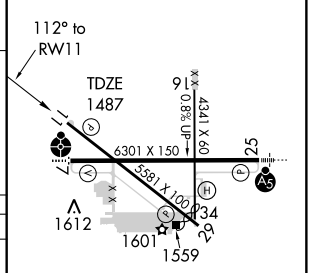
ASOS	CHINOOK APP CON ★	PENDLETON TOWER ★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95





CATEGORY	A	B	C	D
LPV DA	1737-1 250 (300-1)			
LNAV/VNAV DA	1850-1¼ 363 (400-1¼)			
LNAV MDA	1860-1 373 (400-1)			1860-1¼ 373 (400-1¼)
CIRCLING	1920-1 423 (500-1)	1960-1 463 (500-1)	1960-1½ 463 (500-1½)	2060-2 563 (600-2)

ELEV 1497 D



REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 78412 W25A	APP CRS 254°	Rwy Idg 6301 TDZE 1487 Apt Elev 1497

RNAV (GPS) RWY 25

PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)

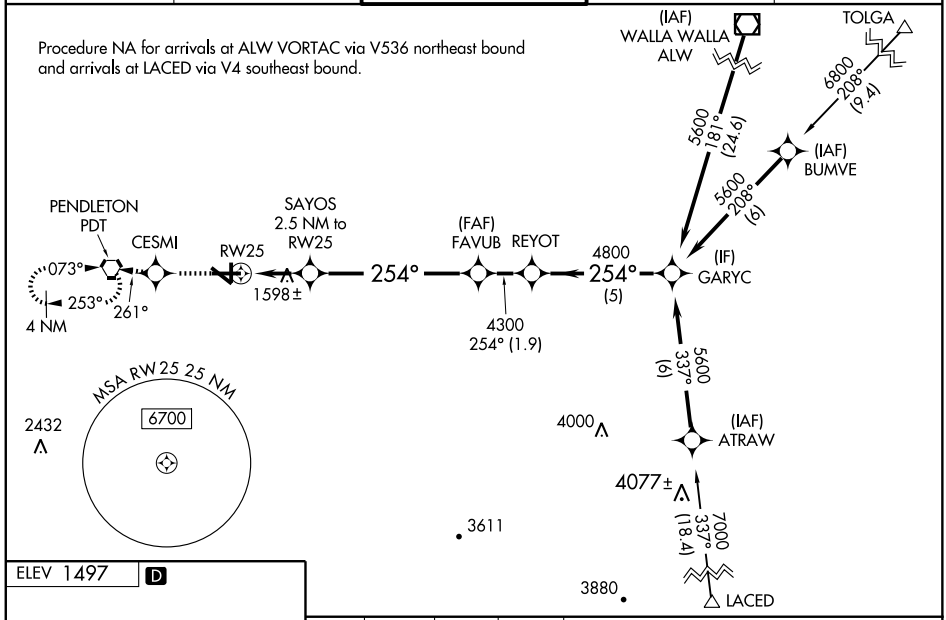
T A For inoperative MALSR, increase LNAV/VNAV Cat D visibility to RVR 5000, and LNAV Cat D to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet, and all visibilities 1 mile; inoperative table does not apply.
VDP and Baro-VNAV NA when using Walla Walla altimeter setting.

MALSR A5

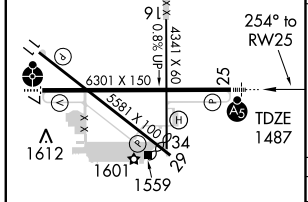
MISSED APPROACH: Climb to 4000 direct CESMI and via track 261° to PDT VORTAC and hold, continue climb-in-hold to 4000.

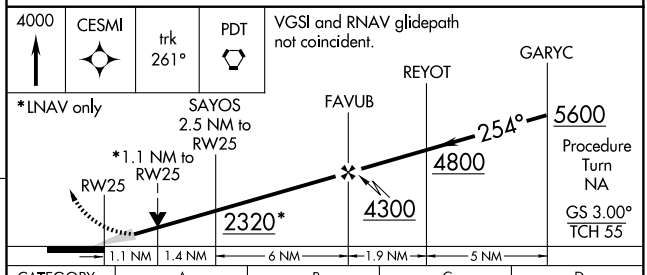
ASOS	CHINOOK APP CON★	PENDLETON TOWER★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95

Procedure NA for arrivals at ALW VORTAC via V536 northeast bound and arrivals at LACED via V4 southeast bound.



ELEV 1497 D





CATEGORY	A	B	C	D
LPV DA	1687/24 200 (200-½)			
LNAV/VNAV DA	1800/24 313 (400-½)			1800/40 313 (400-¾)
LNAV MDA	1860/24 373 (400-½)			1860/50 373 (400-1)
CIRCLING	1920-1 423 (500-1)	1960-1 463 (500-1)	1960-1½ 463 (500-1½)	2060-2 563 (600-2)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L

WAAS CH 42513 W29A	APP CRS 292°	Rwy Idg 5125 TDZE 1497 Apt Elev 1497

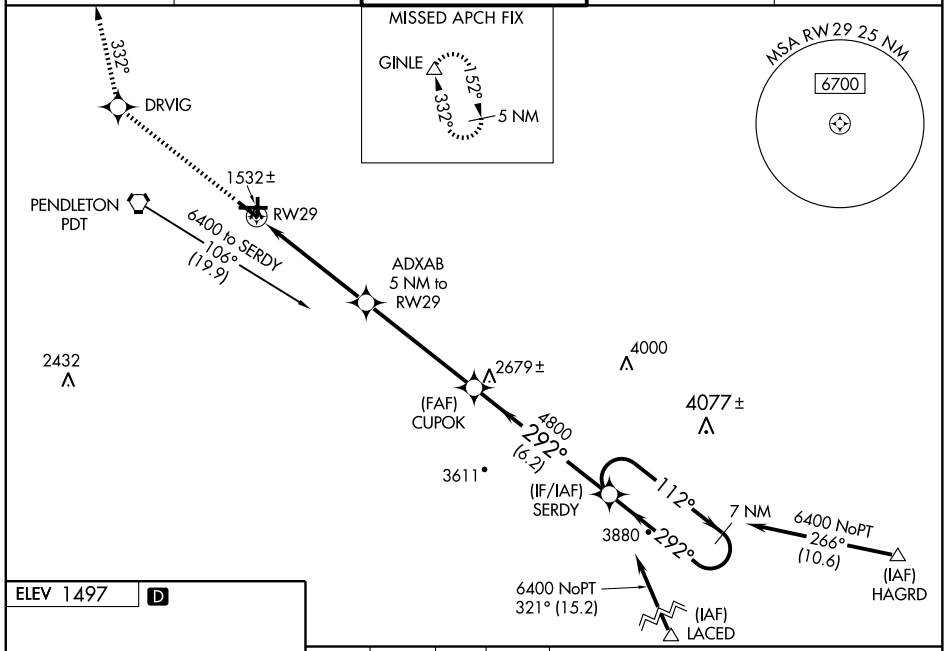
RNAV (GPS) RWY 29

PENDLETON/EASTERN OREGON RGNL AT PENDLETON (PDT)

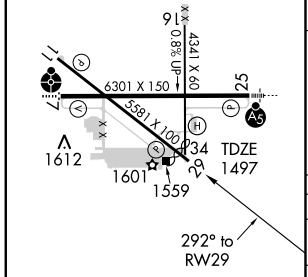
Inoperative table does not apply.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Walla Walla altimeter setting: increase all DA/MDA 120 feet and visibility LPV all Cats ¼ mile, LNAV/VNAV all Cats ½ mile, LNAV Cats C and D ¼ mile and Circling Cat D ¼ mile.
VDP and Baro-VNAV NA when using Walla Walla altimeter setting.

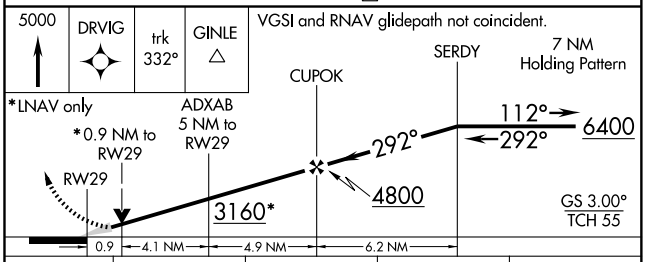
MISSED APPROACH: Climb to 5000 direct DRVIG and via track 332° to GINLE and hold.

ASOS	CHINOOK APP CON ★	PENDLETON TOWER ★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95



ELEV 1497 D





CATEGORY	A	B	C	D
LPV DA	1747-1 250 (300-1)			
LNAV/VNAV DA	1801-1 304 (400-1)			
LNAV MDA	1860-1 363 (400-1)			1860-1¼ 363 (400-1¼)
CIRCLING	1920-1 423 (500-1)	1960-1 463 (500-1)	1960-1½ 463 (500-1½)	2060-2 563 (600-2)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L

VORTAC PDT	APP CRS	Rwy Idg	6301
114.7	073°	TDZE	1486
Chan 94		Apt Elev	1497

VOR RWY 7

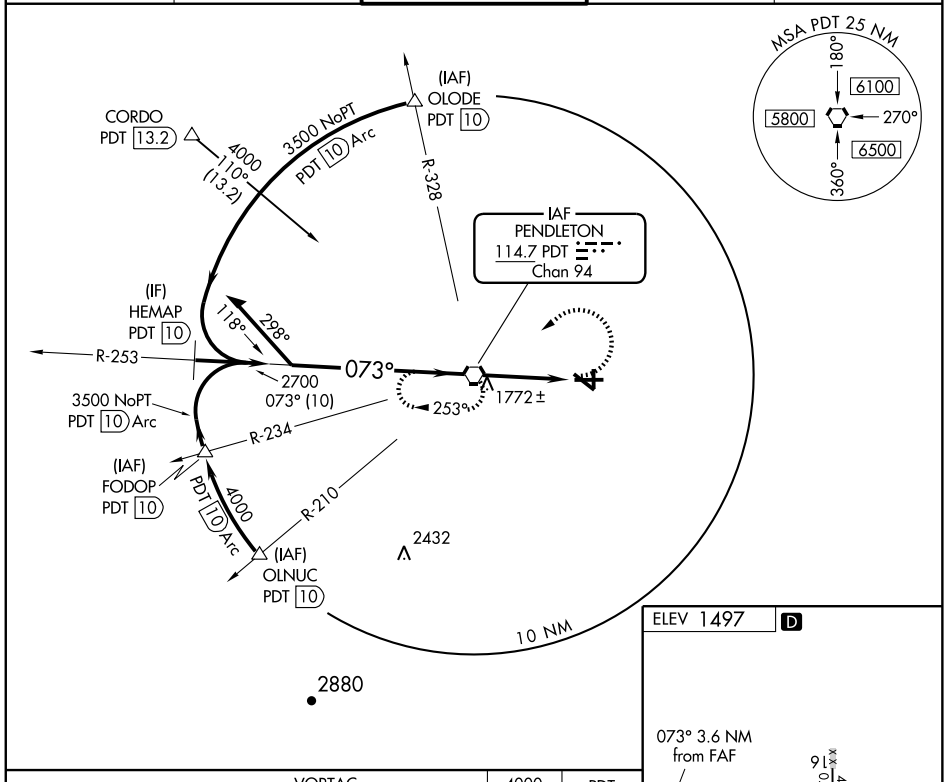
PENDLETON/ EASTERN OREGON RGNL AT PENDLETON (PDT)

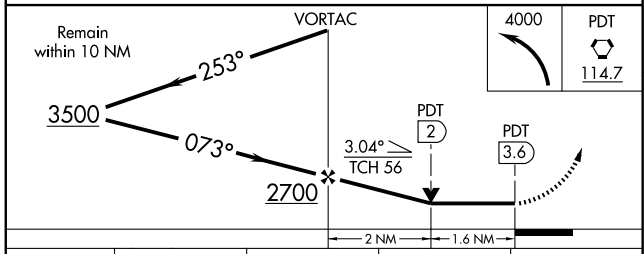
T Inoperative table does not apply to S-7 Cat C.
Visibility reduction by helicopters NA.
A When local altimeter setting not received, use Walla Walla altimeter setting and increase all MDA 120 feet, and all visibilities ½ mile.
Inoperative table does not apply when using Walla Walla altimeter setting.
VDP NA when using Walla Walla altimeter setting.

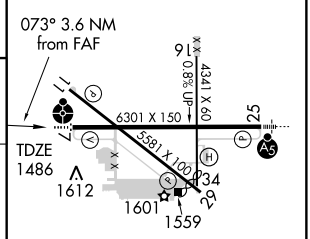
ODALS

MISSED APPROACH: Climbing left turn to 4000 direct PDT VORTAC and hold, continue climb-in-hold to 4000.

ASOS	CHINOOK APP CON ★	PENDLETON TOWER ★	GND CON	UNICOM
118.325	133.15 379.15	119.7 (CTAF) L 257.8	121.9 257.8	122.95







REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 7-25 L

CATEGORY	A	B	C	D
S-7	2040-¾	554 (600-¾)	2040-1½ 554 (600-1½)	2040-1¾ 554 (600-1¾)
CIRCLING	2040-1	543 (600-1)	2040-1½ 543 (600-1½)	2060-2 563 (600-2)

FAF to MAP 3.6 NM

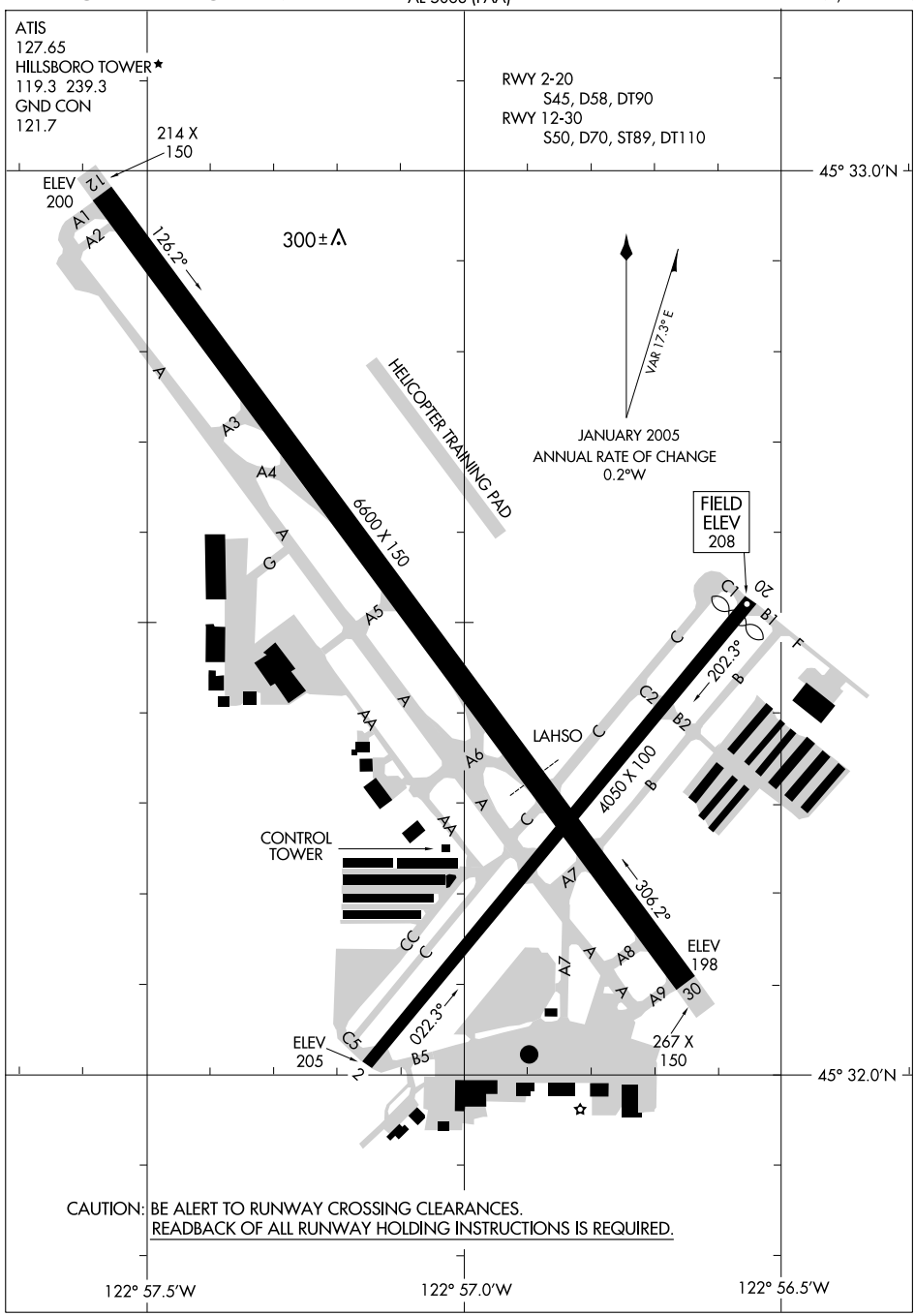
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON



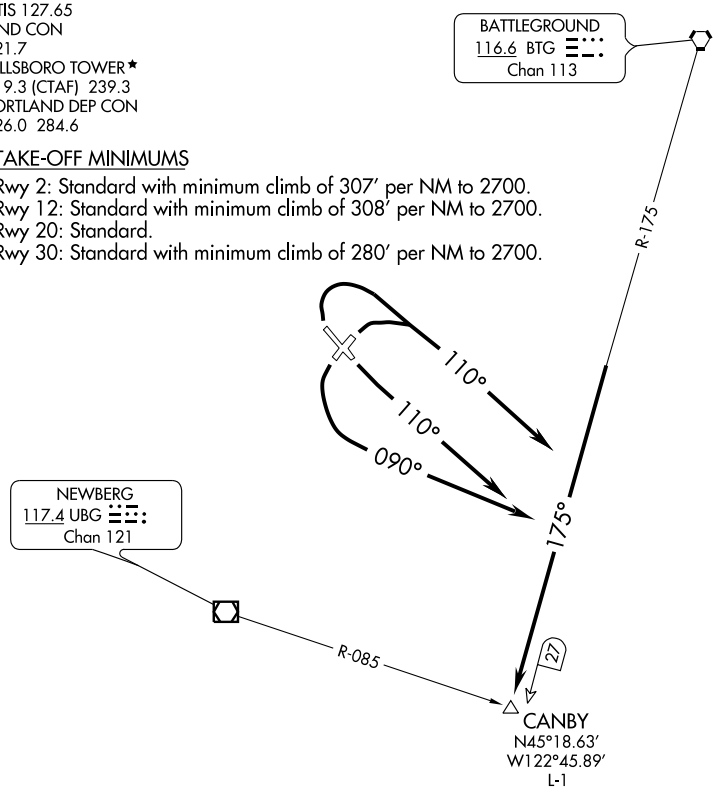
NW-1, 14 JAN 2010 to 11 FEB 2010

CANBY SEVEN DEPARTURE

SL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

ATIS 127.65
GND CON
121.7
HILLSBORO TOWER★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 284.6



TAKE-OFF MINIMUMS

Rwy 2: Standard with minimum climb of 307′ per NM to 2700.
Rwy 12: Standard with minimum climb of 308′ per NM to 2700.
Rwy 20: Standard.
Rwy 30: Standard with minimum climb of 280′ per NM to 2700.

TAKE-OFF OBSTACLE NOTES

Rwy 2: Multiple roads beginning 246′ from DER, 3′ right of centerline, up to 15′ AGL/220′ MSL.
Rwy 12: Multiple trees beginning 1,842′ from DER, 222′ left of centerline, up to 125′ AGL/324′ MSL.
Multiple trees beginning 3,629′ from DER, 46′ right of centerline, up to 143′ AGL/332′ MSL.
Rwy 20: Multiple trees and pole beginning 967′ from DER, 118′ left of centerline, up to 93′ AGL/292′ MSL.
Vent on hangar 63′ from DER, 428′ left of centerline, 26′ AGL/225′ MSL.
Multiple trees and antenna on bldg beginning 965′ from DER, 449′ right of centerline, up to 74′ AGL/273′ MSL.
Rwy 30: Multiple trees beginning 1,664′ from DER, 623′ right of centerline, up to 194′ AGL/363′ MSL.
Pole 702′ from DER, 603′ left of centerline, 26′ AGL/215′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 30: Turn right heading 110°, thence . . . .

TAKE-OFF RUNWAY 12: Turn left heading 110°, thence . . . .

TAKE-OFF RUNWAY 20: Turn left heading 090°, thence . . . .

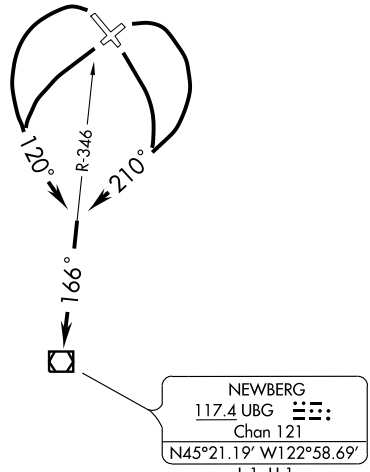
. . . . Intercept and proceed via BTG R-175 to CANBY INT. Thence via (assigned route).

FARMINGTON FOUR DEPARTURE

SL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

ATIS 127.65
GND CON
121.7
HILLSBORO TOWER★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 284.6



TAKE-OFF MINIMUMS

Rwy 2: Standard with minimum climb of 307′ per NM to 2700.
Rwys 12, 20: Standard.
Rwy 30: 200-1¼ or standard with minimum climb of 223′ per NM to 500.
Alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 1600′ prior to departure end of runway.

TAKE-OFF OBSTACLE NOTES

Rwy 2: Multiple roads beginning 246′ from DER, 3′ right of centerline, up to 15′ AGL/220′ MSL.
Rwy 12: Multiple trees beginning 1,842′ from DER, 222′ left of centerline, up to 125′ AGL/324′ MSL.
Multiple trees beginning 3,629′ from DER, 46′ right of centerline, up to 143′ AGL/332′ MSL.
Rwy 20: Multiple trees and pole beginning 967′ from DER, 118′ left of centerline, up to 93′ AGL/292′ MSL.
Vent on hangar 63′ from DER, 428′ left of centerline, 26′ AGL/225′ MSL.
Multiple trees and antenna on bldg beginning 965′ from DER, 449′ right of centerline, up to 74′ AGL/273′ MSL.
Rwy 30: Multiple trees beginning 1,664′ from DER, 623′ right of centerline, up to 194′ AGL/363′ MSL.
Pole 702′ from DER, 603′ left of centerline, 26′ AGL/215′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 12: Turn right heading 210°, thence . . . .

TAKE-OFF RUNWAYS 20, 30: Turn left heading 120°, thence . . . .

. . . . Intercept and proceed via UBG R-346 to UBG VOR/DME. Thence via (assigned route).

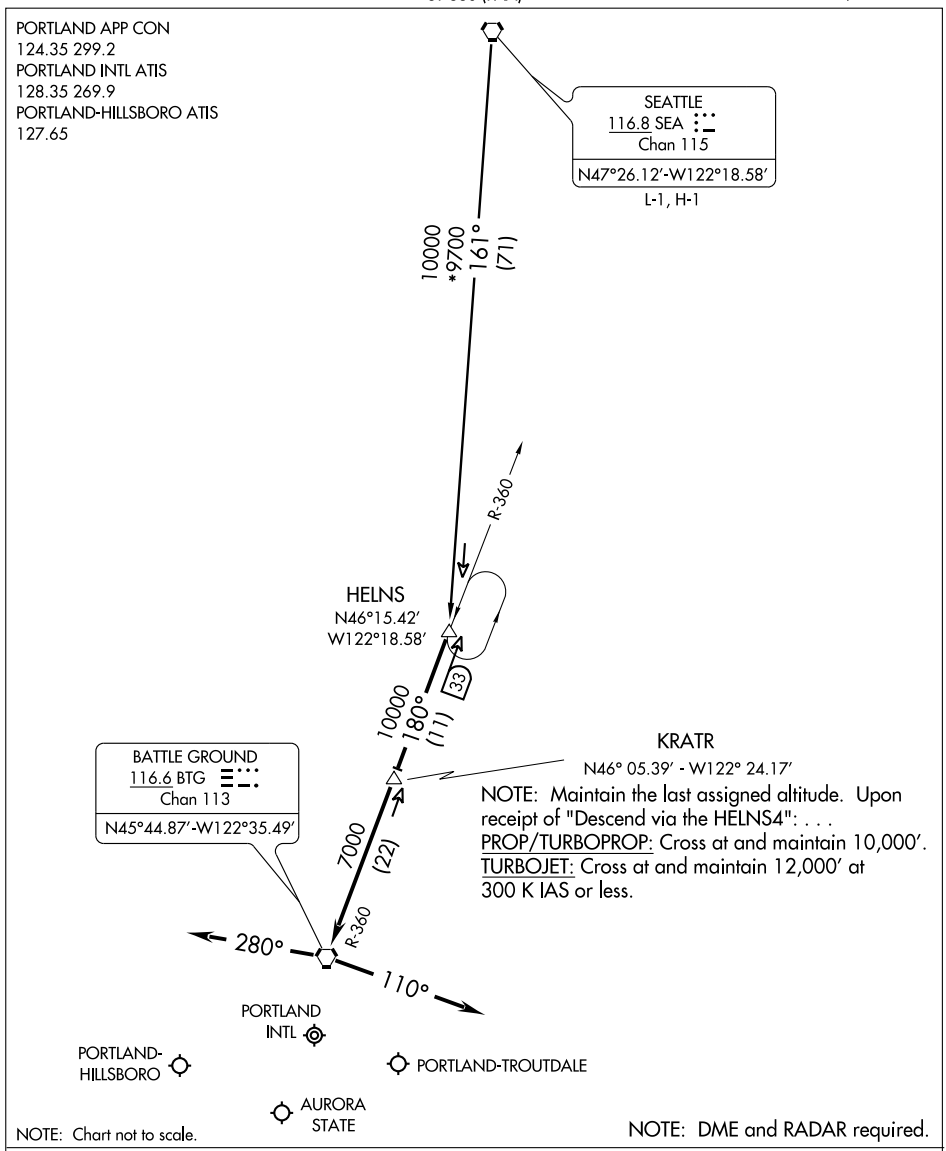
NW-1, 14 JAN 2010 to 11 FEB 2010

(HELNS.HELNS4) 03135

HELNS FOUR ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



SEATTLE TRANSITION (SEA.HELNS4): From over SEA VORTAC via SEA R-161 to HELNS DME FIX. Thence....

.... From over HELNS DME FIX via BTG R-360 to BTG VORTAC. Thence....

LANDING EAST: Depart BTG VORTAC heading 280° for vectors to final approach course.

LANDING WEST: Depart BTG VORTAC heading 110° for vectors to final approach course.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-HIO	APP CRS	Rwy Idg	6600
110.7	123°	TDZE	199
		Apt Elev	204

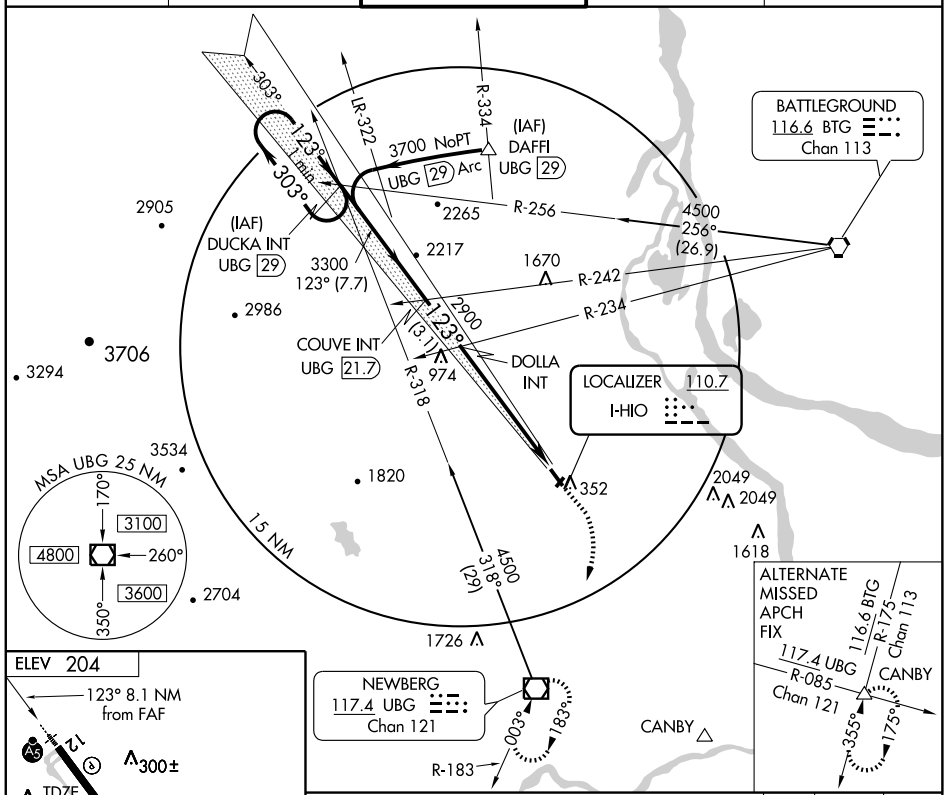
ILS or LOC RWY 12
PORTLAND-HILLSBORO (HIO)

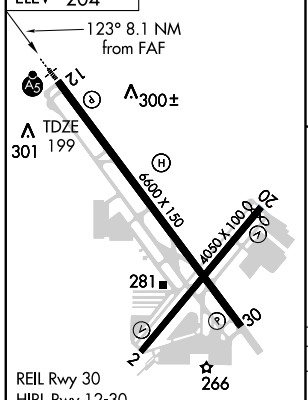
DUCKA INT requires UBG VOR/DME and BTG VORTAC. If local altimeter setting not received, use Portland Intl altimeter setting and increase all DAs/MDAs 60 feet.

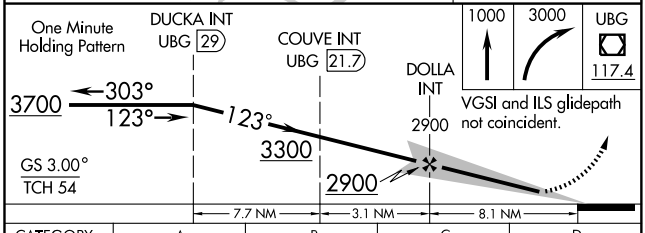
MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR/DME and hold.

ATIS	PORTLAND APP CON	HILLSBORO TOWER★	GND CON	UNICOM
127.65	126.0 284.6	119.3 (CTAF) L 239.3	121.7	122.95







FAF to MAP 8.1 NM					
Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

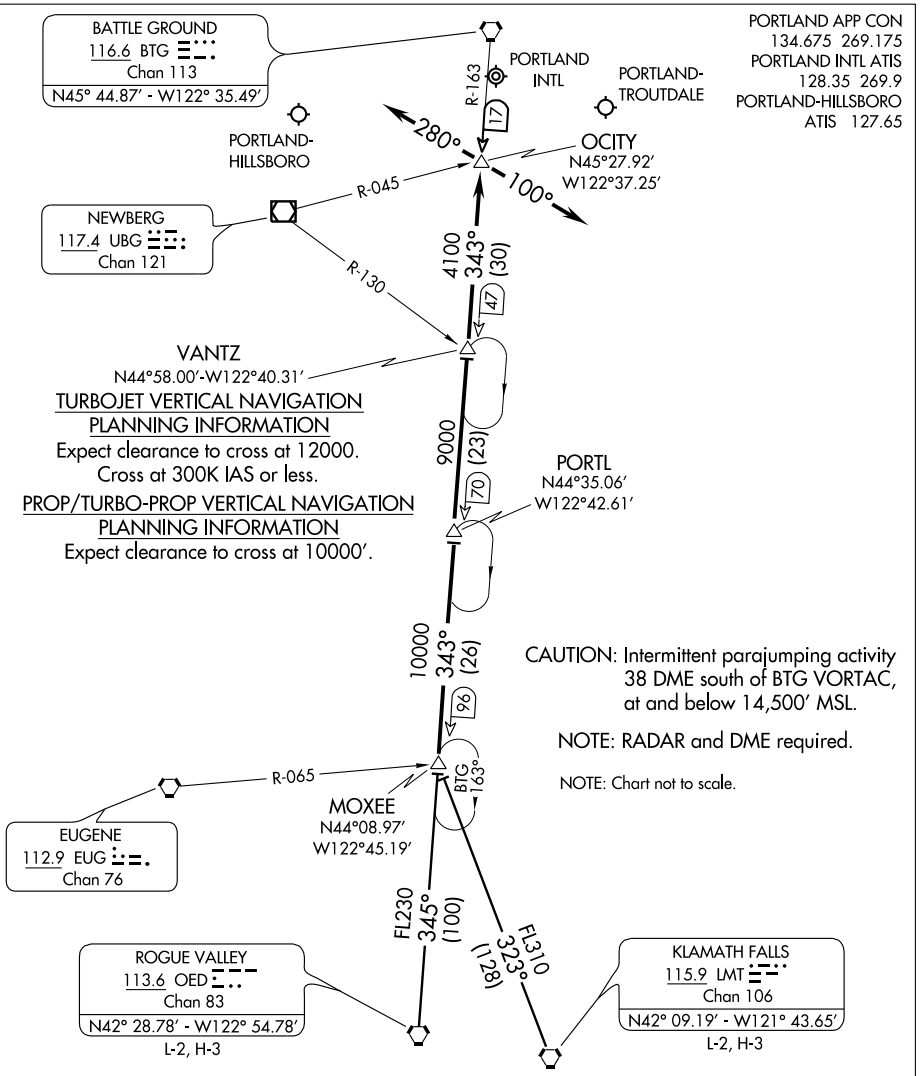
CATEGORY	A	B	C	D
S-ILS 12	399-½ 200 (200-½)			
S-LOC 12	1140-¾ 941 (1000-¾)		1140-2¼ 941 (1000-2¼)	1140-2½ 941 (1000-2½)
CIRCLING	1140-1¼ 936 (1000-1¼)		1140-2¾ 936 (1000-2¾)	1140-3 936 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

MOXEE SIX ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



KLAMATH FALLS TRANSITION (LMT.MOXEE6): From over LMT VORTAC via LMT R-323 to MOXEE INT. Thence . . . .

ROGUE VALLEY TRANSITION (OED.MOXEE6): From over OED VORTAC via OED R-345 to MOXEE INT. Thence . . . .

. . . . From over MOXEE INT via BTG R-163 to OCITY INT. Thence via:

Landing East - Depart OCITY INT heading 280° for vectors to final approach course.

Landing West - Depart OCITY INT heading 100° for vectors to final approach course.

LOST COMMUNICATIONS: After OCITY INT, proceed direct BTG VORTAC.

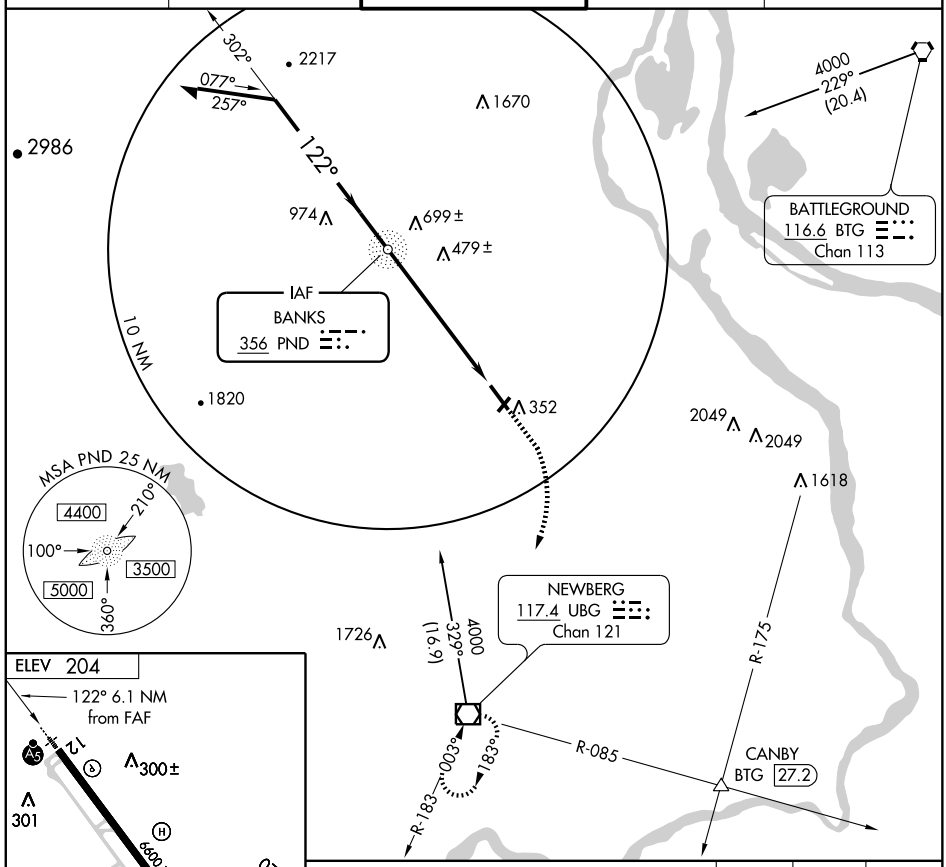
NW-1, 14 JAN 2010 to 11 FEB 2010

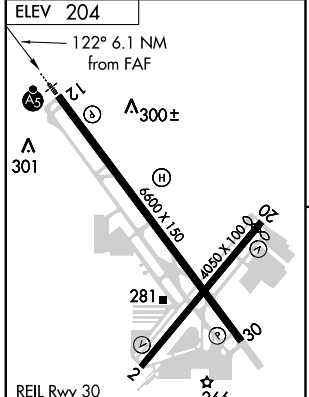
PND NDB	APP CRS	Rwy Idg	N/A
356	122°	TDZE	N/A
		Apt Elev	204

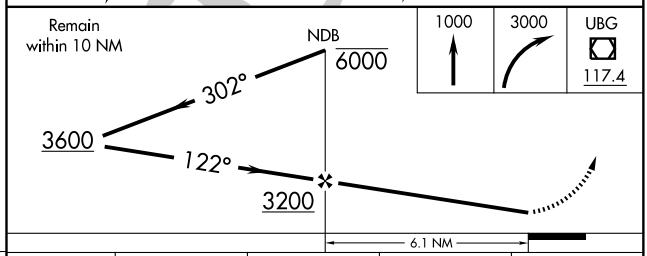
NDB-B
PORTLAND-HILLSBORO (HIO)

MISSED APPROACH: Climb to 1000, then climbing right turn to 3000 direct UBG VOR/DME and hold.

ATIS	PORTLAND APP CON	HILLSBORO TOWER*	GND CON	UNICOM
127.65	126.0 284.6	119.3 (CTAF) 239.3	121.7	122.95







FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

CATEGORY	A	B	C	D
CIRCLING	900-1 696 (700-1)		900-2 696 (700-2)	960-2½ 756 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 69502 W12A	APP CRS 124°	Rwy Idg 6600 TDZE 199 Apt Elev 204

RNAV (GPS) RWY 12

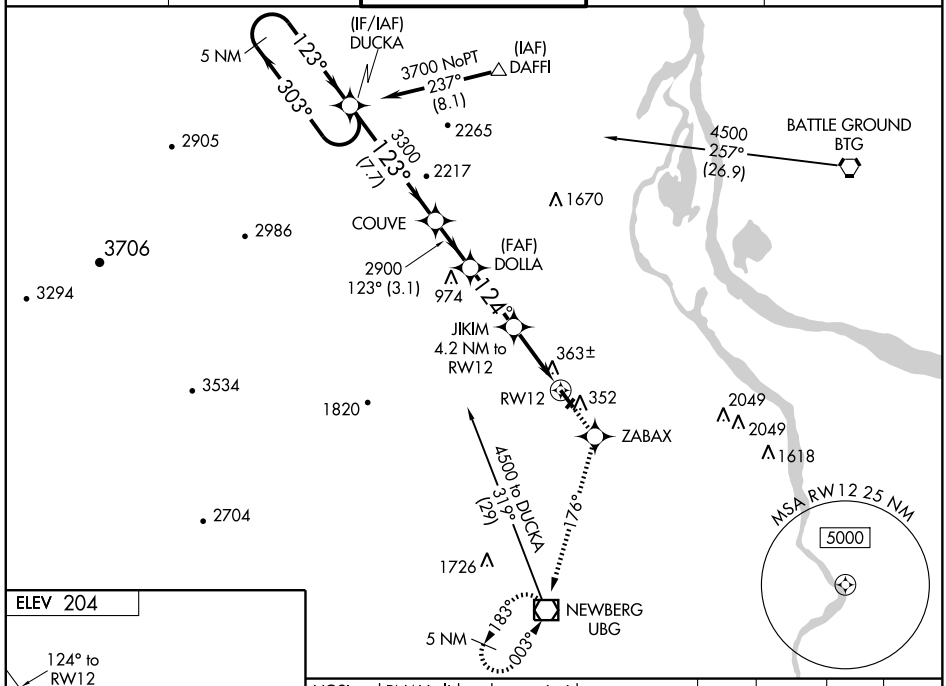
PORTLAND-HILLSBORO (HIO)

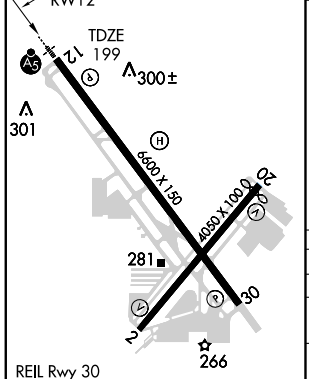
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Portland Intl altimeter setting and increase all DAs/MDAs 60 feet.
VDP NA when using Portland Intl altimeter setting.
For inoperative MALSR, increase LPV all Cats visibility to 1½, and LNAV Cat D visibility 1¼. Baro-VNAV NA when using Portland Intl altimeter setting.

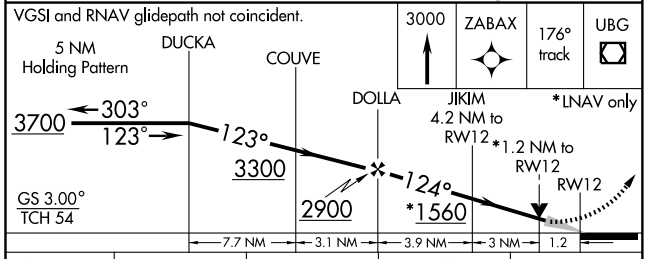
MALSR

MISSED APPROACH: Climb to 3000 direct ZABAX and via 176° track to UBG VOR/DME and hold, continue climb-in-hold to 3000.

ATIS	PORTLAND APP CON	HILLSBORO TOWER★	GND CON	UNICOM
127.65	126.0 284.6	119.3 (CTAF) L 239.3	121.7	122.95







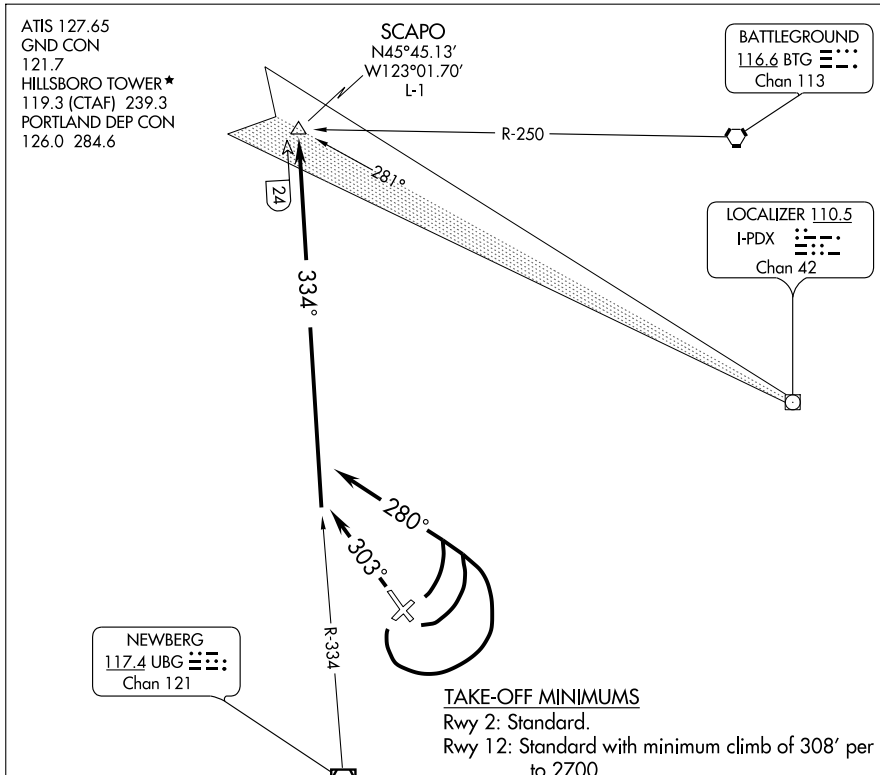
CATEGORY	A	B	C	D
LPV DA	598-1 399 (400-1)			
LNAV/VNAV DA	651-1 452 (500-1)			
LNAV MDA	620-½ 421 (500-½)		620-¾ 421 (500-¾)	620-1 421 (500-1)
CIRCLING	680-1½ 476 (500-1½)			760-2 556 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SCAPO FOUR DEPARTURE

SL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON



TAKE-OFF MINIMUMS

Rwy 2: Standard.
Rwy 12: Standard with minimum climb of 308′ per NM to 2700.
Rwy 20: Standard.
Rwy 30: 200-1¼ or standard with minimum climb of 223′ per NM to 2700.

TAKE-OFF OBSTACLE NOTES

Rwy 2: Multiple roads beginning 246′ from DER, 3′ right of centerline, up to 15′ AGL/220′ MSL.
Rwy 12: Multiple trees beginning 1,842′ from DER, 222′ left of centerline, up to 125′ AGL/324′ MSL.
Multiple trees beginning 3,629′ from DER, 46′ right of centerline, up to 143′ AGL/332′ MSL.
Rwy 20: Multiple trees and pole beginning 967′ from DER, 118′ left of centerline, up to 93′ AGL/292′ MSL.
Vent on hangar 63′ from DER, 428′ left of centerline, 26′ AGL/225′ MSL.
Multiple trees and antenna on bldg beginning 965′ from DER, 449′ right of centerline, up to 74′ AGL/273′ MSL.
Rwy 30: Multiple trees beginning 1,664′ from DER, 623′ right of centerline, up to 194′ AGL/363′ MSL.
Pole 702′ from DER, 603′ left of centerline, 26′ AGL/215′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 12, AND 20: Turn left heading 280°, thence . . . .

TAKE-OFF RUNWAY 30: Climb via heading 303°, thence . . . .

. . . . Intercept and proceed via UBG R-334 to SCAPO INT, thence via (assigned route).

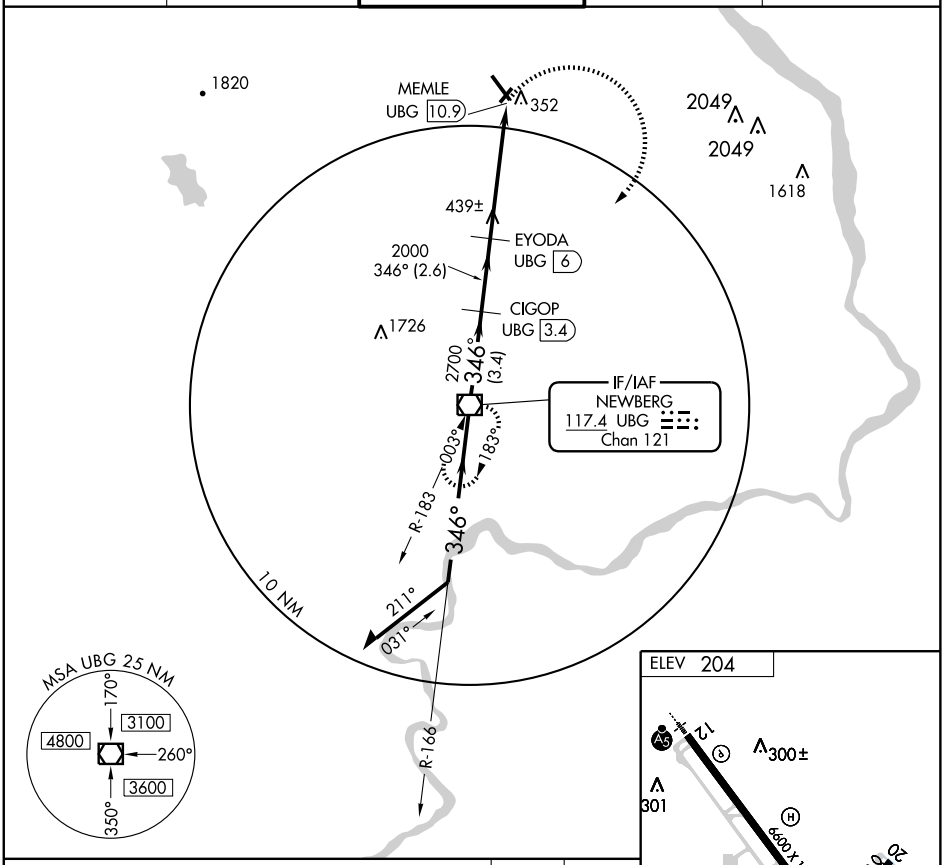
VOR/DME UBG	APP CRS	Rwy Idg	N/A
117.4	346°	TDZE	N/A
Chan 121		Apt Elev	204

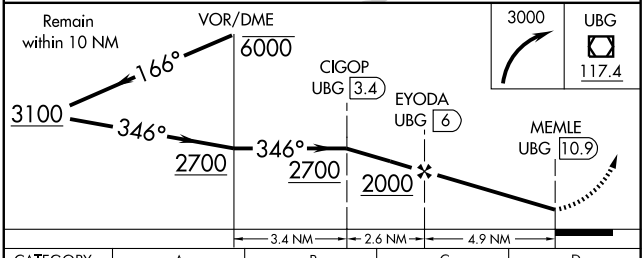
VOR/DME-C

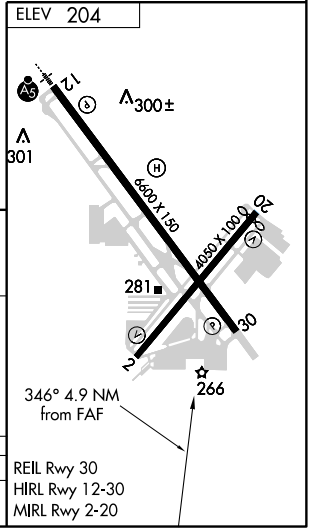
PORTLAND-HILLSBORO (HIO)

MISSED APPROACH: Climbing right turn to 3000 direct UBG VOR/DME and hold.

ATIS	PORTLAND APP CON	HILLSBORO TOWER*	GND CON	UNICOM
127.65	126.0 284.6	119.3 (CTAF) 239.3	121.7	122.95



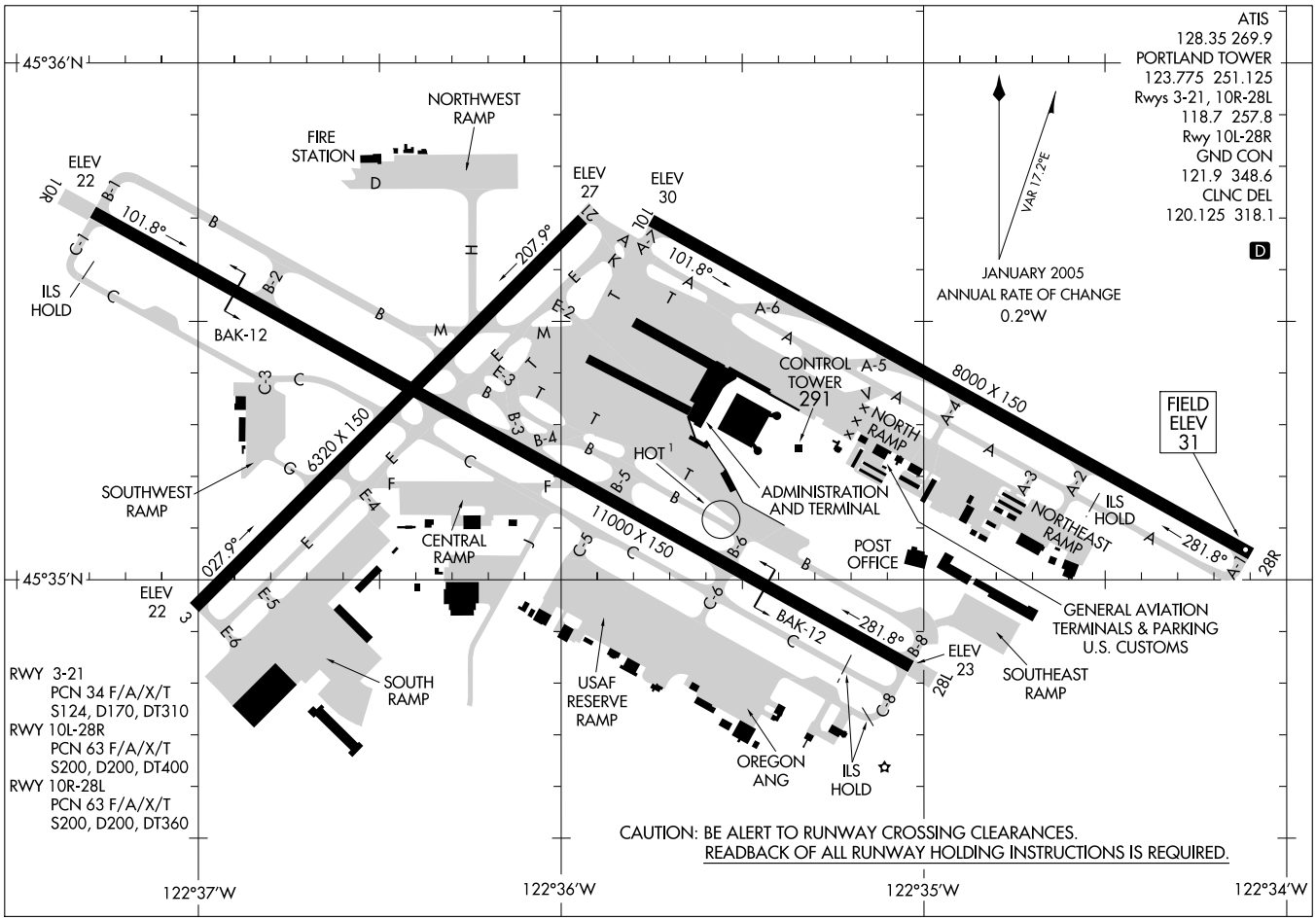




CATEGORY	A	B	C	D
CIRCLING	700-1 496 (500-1)		700-1½ 496 (500-1½)	760-2 556 (600-2)

REIL Rwy 30
HIRL Rwy 12-30
MIRL Rwy 2-20

NW-1, 14 JAN 2010 to 11 FEB 2010


AIRPORT DIAGRAM
AL-330 (FAA)
PORTLAND INTL (PDX)
PORTLAND, OREGON
ATIS
128.35 269.9
PORTLAND TOWER
123.775 251.125
Rwys 3-21, 10R-28L
118.7 257.8
Rwy 10L-28R
GND CON
121.9 348.6
CLNC DEL
120.125 318.1
D
VAR 17.2°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
45°36'N
45°35'N
122°37'W
122°36'W
122°35'W
122°34'W
NORTHWEST RAMP
FIRE STATION
ELEV 22
ELEV 27
ELEV 30
ELEV 22
ELEV 23
10R
28L
10L
28R
101.8°
207.9°
027.9°
281.8°
ILS HOLD
BAK-12
CONTROL TOWER 291
ADMINISTRATION AND TERMINAL
NORTH RAMP
NORTHEAST RAMP
SOUTHWEST RAMP
CENTRAL RAMP
SOUTH RAMP
USAF RESERVE RAMP
SOUTHEAST RAMP
POST OFFICE
GENERAL AVIATION TERMINALS & PARKING
U.S. CUSTOMS
OREGON ANG
HOT 1
8000 X 150
6320 X 150
11000 X 150
FIELD ELEV 31
RWY 3-21
PCN 34 F/A/X/T
S124, D170, DT310
RWY 10L-28R
PCN 63 F/A/X/T
S200, D200, DT400
RWY 10R-28L
PCN 63 F/A/X/T
S200, D200, DT360
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

PORTLAND APP CON
124.35 299.2
ATIS
128.35 269.9

KIMBERLY TRANSITION (IMB.BONVL6): From over IMB VORTAC via IMB R-287 to DUFUR, then via PDX R-079 to BONVL, Thence. . . .

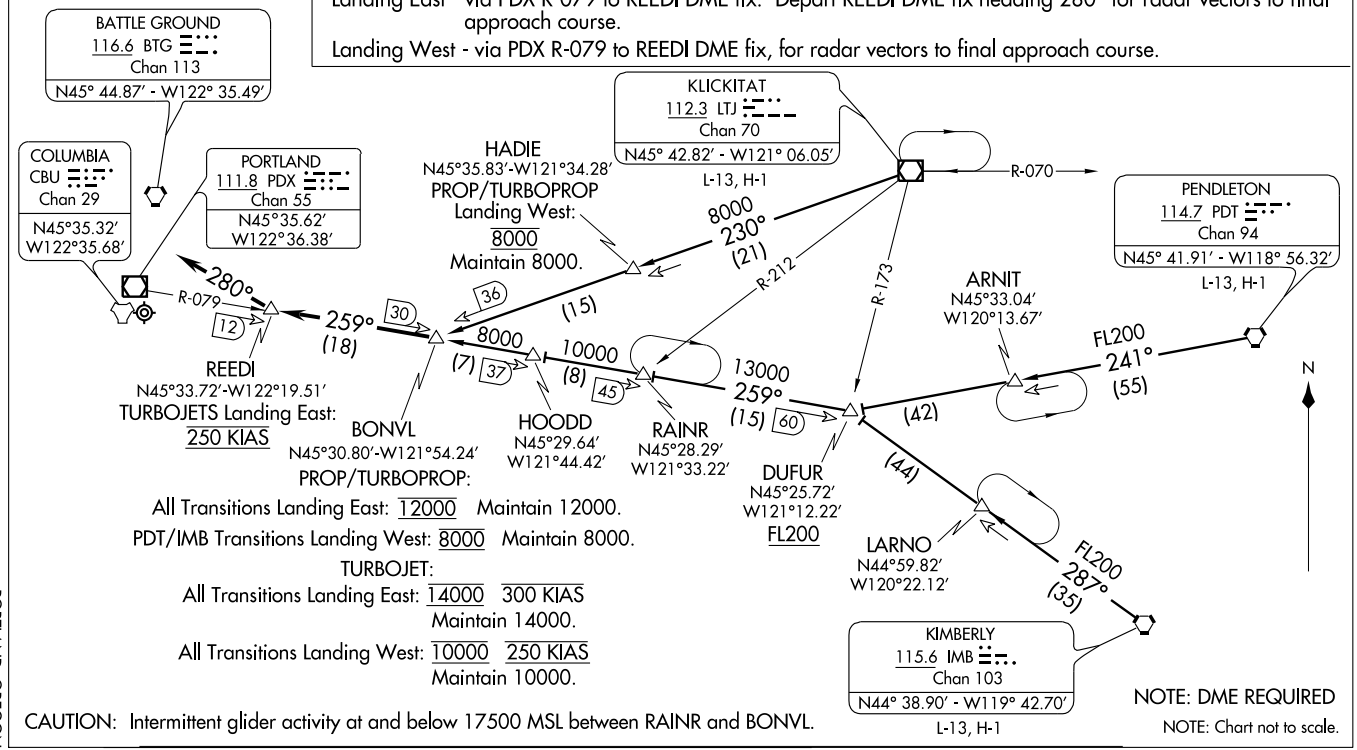
KLICKITAT TRANSITION (LTJ.BONVL6): From over LTJ VOR/DME via LTJ R-230 to BONVL. Thence. . . .

PENDLETON TRANSITION (PDT.BONVL6): From over PDT VORTAC via PDT R-241 to DUFUR, then via PDX R-079 to BONVL. Thence. . . .

....From over BONVL :

Landing East - via PDX R-079 to REEDI DME fix. Depart REEDI DME fix heading 280° for radar vectors to final approach course.

Landing West - via PDX R-079 to REEDI DME fix, for radar vectors to final approach course.

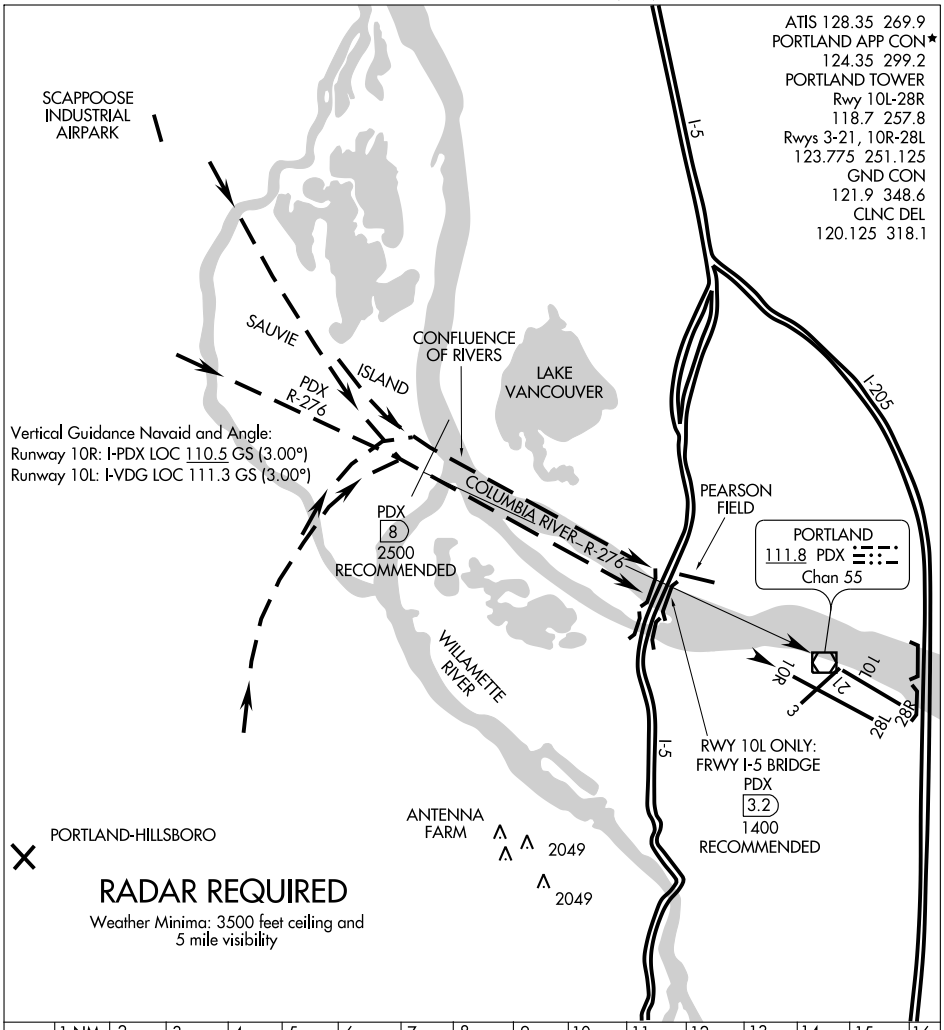


CAUTION: Intermittent glider activity at and below 17500 MSL between RAINR and BONVL.

COLUMBIA VISUAL RWY 10L/R

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



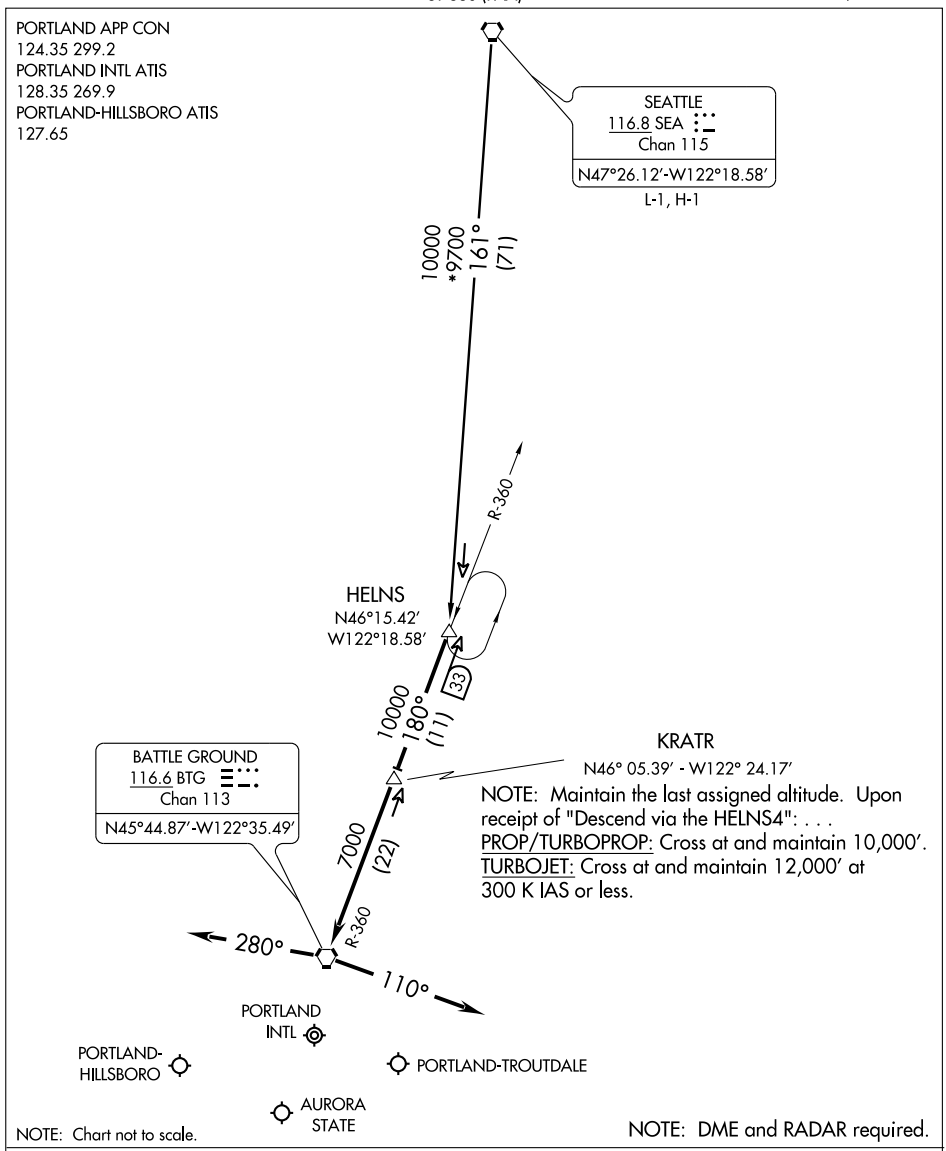
PROCEDURE NOT AUTHORIZED AT NIGHT.

(HELNS.HELNS4) 03135

HELNS FOUR ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



SEATTLE TRANSITION (SEA.HELNS4): From over SEA VORTAC via SEA R-161 to HELNS DME FIX. Thence....

.... From over HELNS DME FIX via BTG R-360 to BTG VORTAC. Thence....

LANDING EAST: Depart BTG VORTAC heading 280° for vectors to final approach course.

LANDING WEST: Depart BTG VORTAC heading 110° for vectors to final approach course.

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-ILS or LOC/DME RWY 10R

LOCALIZER I-PDX	APCH CRS	Rwy ldg	11,000
110.5	101°	TDZE	24
Chan 42		Arpt Elev	30

JAL-330 [USAF]

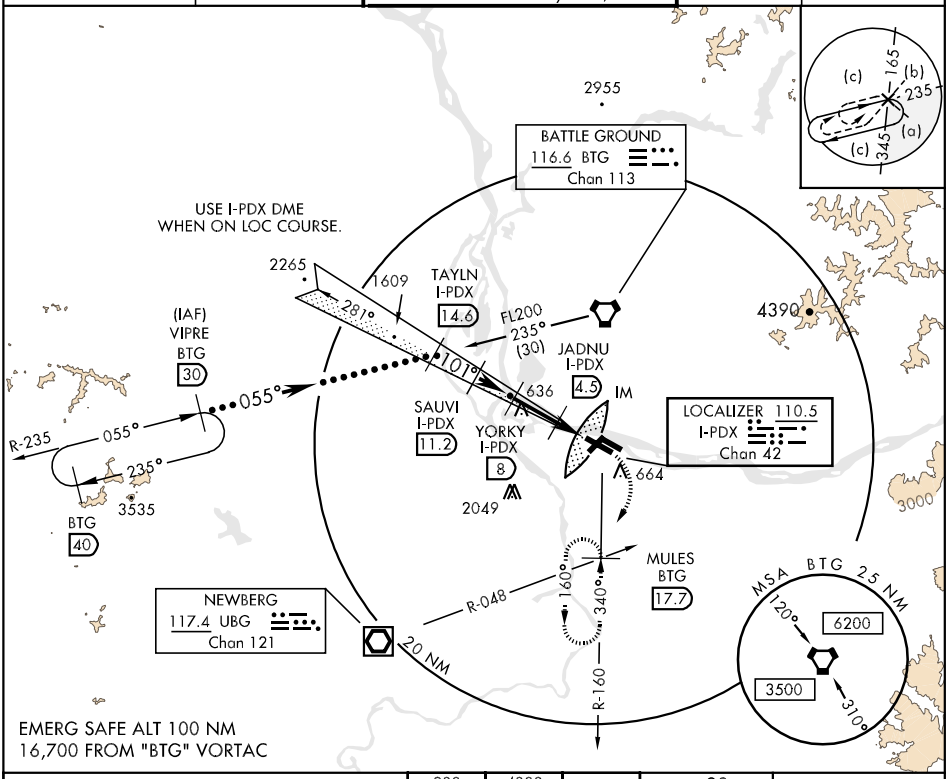
PORTLAND INTL (KPDX)

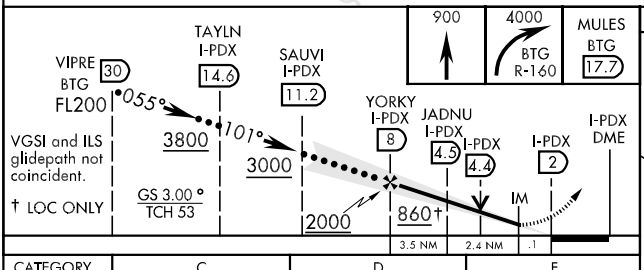
▼ * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.

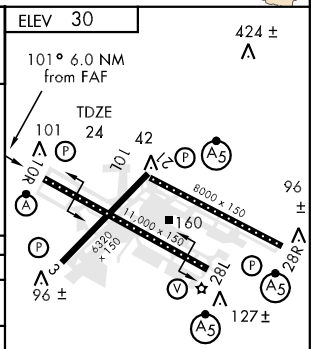
ALSF-2

MISSED APPROACH: Climb to 900, then climbing right turn to 4000 via BTG VORTAC R-160 to MULES and hold.

ATIS	PORTLAND APP CON	PORTLAND TOWER	GND CON	CLNC DEL
ARR 128.35 269.9	124.35 299.2	118.7 257.8 Rwy 10L-28R	121.9 348.6	120.125 318.1
DEP 120.625 239.25		123.775 251.125 Rwy 3-21, 10R-28L		







REIL Rwy 3-21
TDZL/CL 10R
MIRL Rwy 3-21
HIRL Rwy 10L-28R, 28L-10R

CATEGORY	C	D	E
S-ILS 10R *	224/18 200 (200-⅜)		224/24 200 (200-½)
S-LOC/DME 10R **	380/24 356 (400-½)	380/40 356 (400-¾)	
CIRCLING	740-2 710 (800-2)	1020-3 990 (1000-3)	1060-3 1030 (1100-3)

PORTLAND, OREGON

HI-ILS or LOC/DME RWY 28R

LOCALIZER I-IAP	APCH CRS	Rwy ldg	8000
111.3	279°	TDZE	30
Chan 50		Arpt Elev	30

JAL-330 [USAF]

PORTLAND INTL (KPDX)

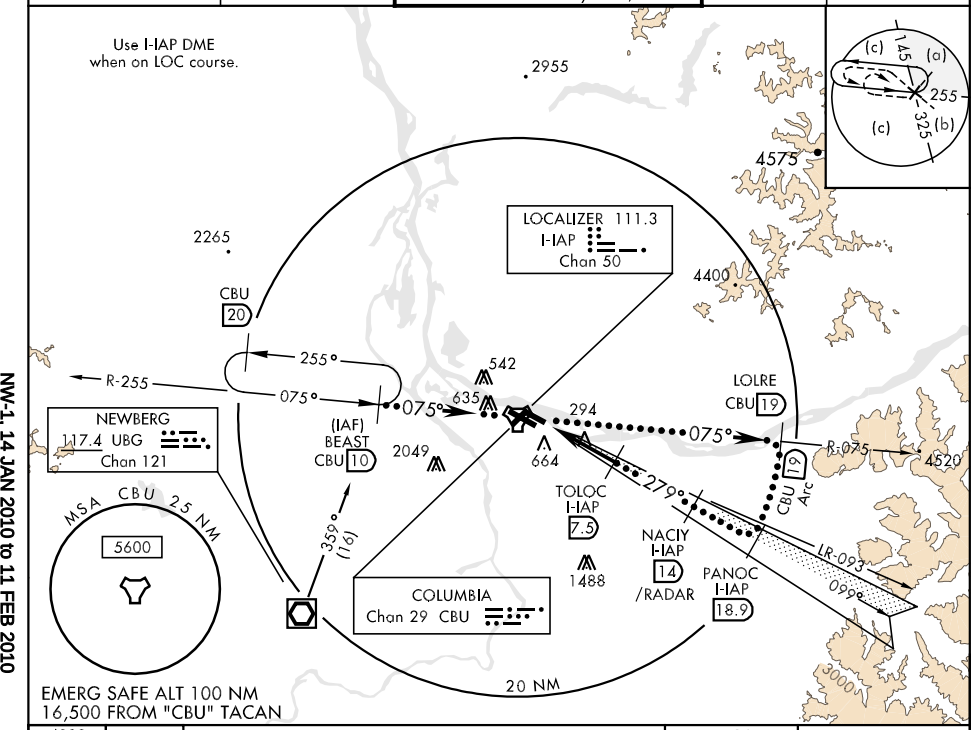
▼ * When ALS inop, increase CAT E vis to 2 miles.
** Circling NA at night to Rwy 3.

MALSR A5

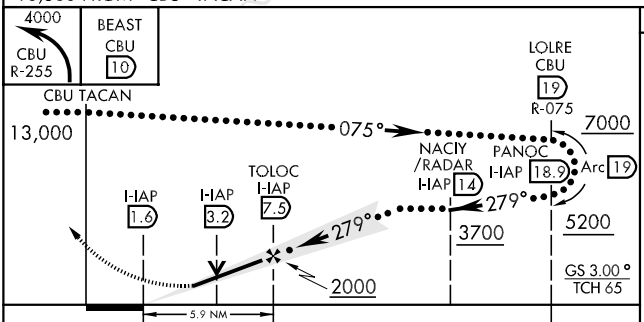
MISSED APPROACH: Climbing left turn to 4000 via CBU TACAN R-255 to BEAST and hold.

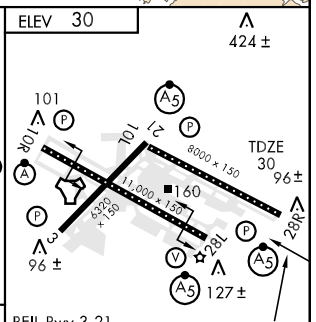
ATIS	PORTLAND APP CON	PORTLAND TOWER	GND CON	CLNC DEL
ARR 128.35 269.9	124.35 299.2	118.7 257.8 Rwy 10L-28R	121.9 348.6	120.125 318.1
DEP 120.625 239.25		123.775 251.125 Rwy 3-21, 10R-28L		

Use I-IAP DME when on LOC course.



EMERG SAFE ALT 100 NM
16,500 FROM "CBU" TACAN





CATEGORY	C	D	E
S-ILS 28R	280/40	250	(300-¾)
S-LOC 28R*	600/50 570 (600-1)	600/60 570 (600-1¼)	600-1½ 570 (600-1½)
CIRCLING**	740-2 710 (800-2)	1020-3 990 (1000-3)	1060-3 1030 (1100-3)

LOC FAF to MAP 5.9 NM

Knots	120	140	160	180	200
Min:Sec	2:57	2:32	2:32	1:58	1:46

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 10R

TACAN	CBU	APCH CRS	Rwy ldg	11,000
Chan	29	106°	TDZE	24
			Arpt Elev	30

JAL-330 [USAF]

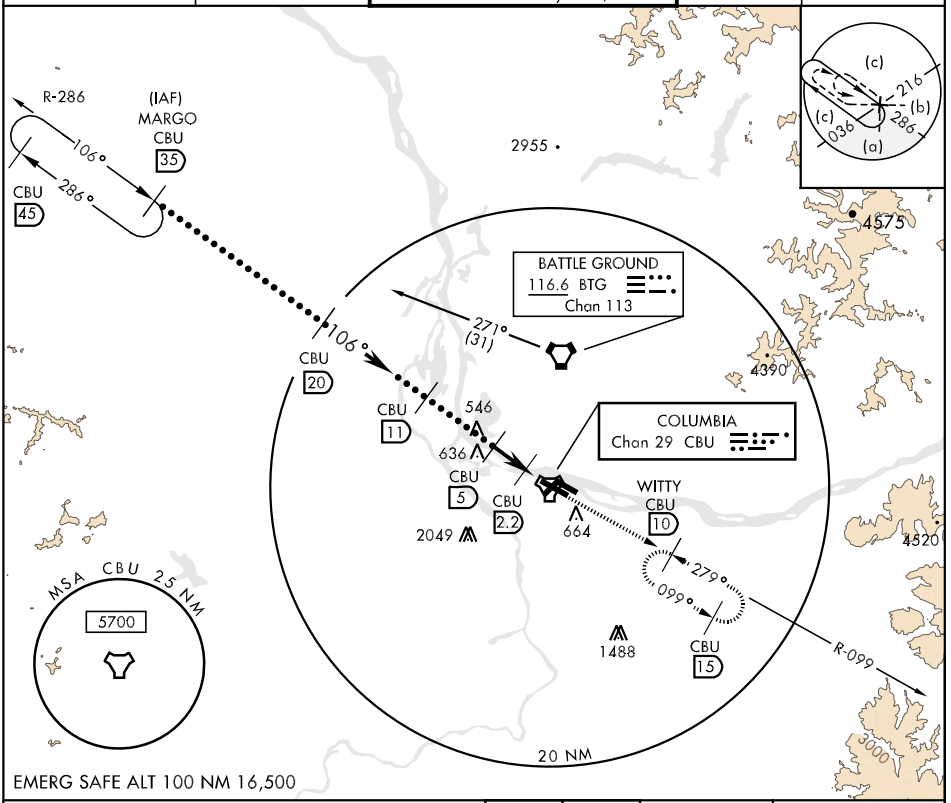
PORTLAND INTL (KPDX)

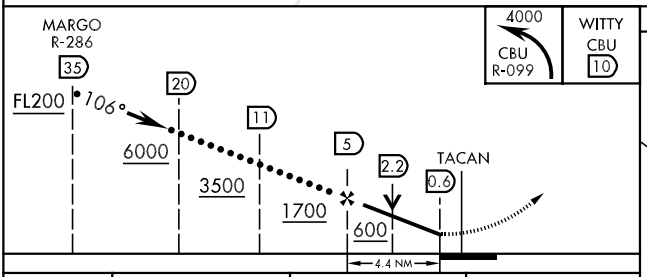
▼ * When ALS inop, increase CAT C RVR to 50 and vis to 1 mile.

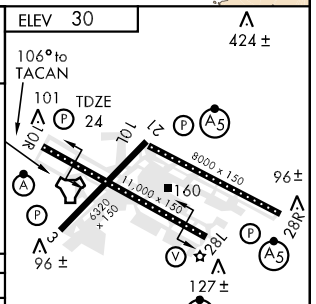
ALSF-2

MISSED APPROACH: Climb to 4000 via CBU TACAN R-099 to WITTY/CBU 10 DME and hold.

ATIS	PORTLAND APP CON	PORTLAND TOWER	GND CON	CLNC DEL
ARR 128.35 269.9	124.35 299.2	118.7 257.8 Rwy 10L-28R	121.9 348.6	120.125 318.1
DEP 120.625 239.25		123.775 251.125 Rwy 3-21, 10R-28L		





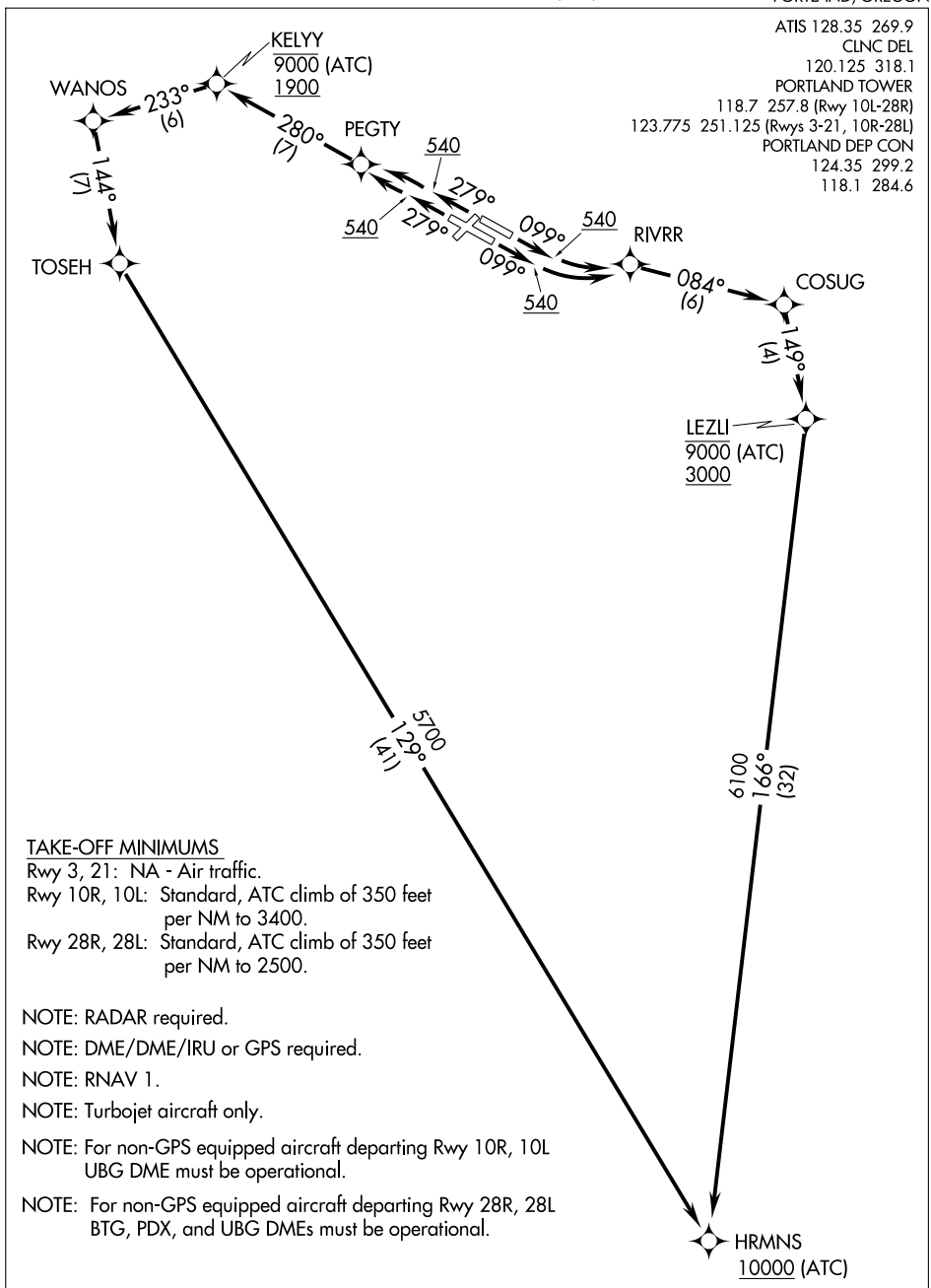


CATEGORY	C	D	E
S-10R *	380/24 356 (400-½)	380/50 356 (400-1)	
CIRCLING	740-2 710 (800-2)	1020-3 990 (1000-3)	1060-3 1030 (1100-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

HRMNS ONE DEPARTURE (RNAV) SL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



TAKE-OFF MINIMUMS

Rwy 3, 21: NA - Air traffic.
Rwy 10R, 10L: Standard, ATC climb of 350 feet per NM to 3400.
Rwy 28R, 28L: Standard, ATC climb of 350 feet per NM to 2500.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: Turbojet aircraft only.

NOTE: For non-GPS equipped aircraft departing Rwy 10R, 10L UBG DME must be operational.

NOTE: For non-GPS equipped aircraft departing Rwy 28R, 28L BTG, PDX, and UBG DMEs must be operational.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NW-1, 14 JAN 2010 to 11 FEB 2010

HRMNS ONE DEPARTURE (RNAV) SL-330 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 10R: Climb heading 099° to 540 feet, then left turn direct RIVRR, and via 084° track to COSUG, and via 149° track to cross LEZLI at or below 9000 (ATC)/3000, then via 166° track to HRMNS, cross HRMNS at or above 10000 (ATC), thence....

TAKE-OFF RUNWAY 10L: Climb heading 099° to 540 feet, then left turn direct RIVRR, and via 084° track to COSUG, and via 149° track to cross LEZLI at or below 9000 (ATC)/3000, then via 166° track to HRMNS, cross HRMNS at or above 10000 (ATC), thence....

TAKE-OFF RUNWAY 28R: Climb heading 279° to 540 feet, then left turn direct PEGTY, and via 280° track to cross KELYY at or below 9000 (ATC)/1900, then via track 233° to WANOS, and via 144° track to TOSEH, and via 129° track to HRMNS, cross HRMNS at or above 10000 (ATC), thence....

TAKE-OFF RUNWAY 28L: Climb heading 279° to 540 feet, then right turn direct PEGTY, and via 280° track to cross KELYY at or below 9000 (ATC)/1900, then via track 233° to WANOS, and via 144° track to TOSEH, and via 129° track to HRMNS, cross HRMNS at or above 10000 (ATC), thence....

....maintain assigned altitude, expect filed altitude 10 minutes after departure.

TAKE-OFF OBSTACLE NOTES

Rwy 10L: Rising terrain and vehicle on road beginning 7′ from DER, 376′ left of centerline, up to 17′ AGL/60′ MSL.
Rwy 10R: Pole 1996′ from DER, 758′ right of centerline, 54′ AGL/74′ MSL
Rwy 28L: Trees 1873′ from DER, 836′ left of centerline, 50′ AGL/88′ MSL.
Rwy 28R: Multiple signs, poles, and vehicle on road beginning 876′ from DER, 654′ right of centerline, up to 27′ AGL/69′ MSL.

PORTLAND, OREGON

AL-330 (FAA)

ILS or LOC RWY 10L

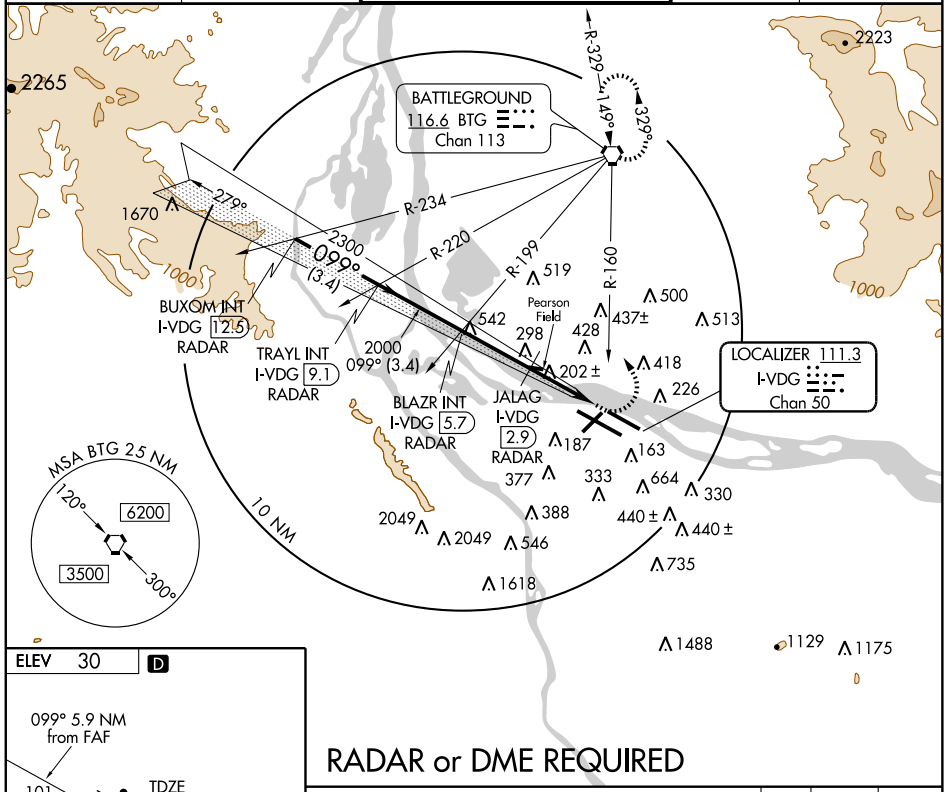
PORTLAND INTL (PDX)

LOC/DME I-VDG	APP CRS	Rwy Idg	8000
111.3	099°	TDZE	30
Chan 50		Apt Elev	30

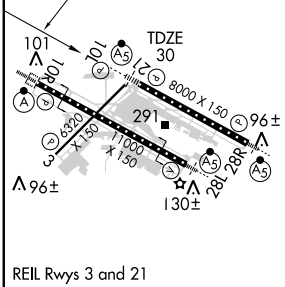
MALSR

MISSED APPROACH: Climb to 700, then climbing left turn to 4000 via BTG R-160 to BTG VORTAC and hold.

ATIS	PORTLAND APP CON*	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1



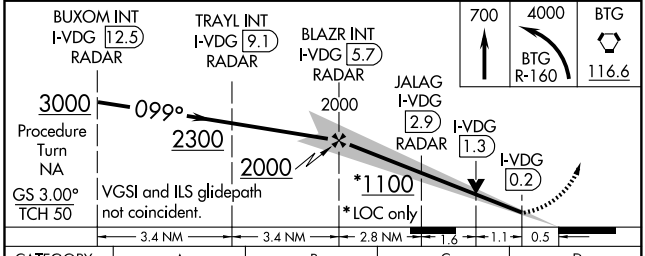
ELEV 30 D



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

RADAR or DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 10L	293/24	263 (300-½)		
S-LOC 10L	480/24 450 (500-½)		480/50 450 (500-1)	480/60 450 (500-1¼)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-PDX	APP CRS	Rwy Idg 11000
110.5	101°	TDZE 24
Chan 42		Apt Elev 30

ILS or LOC RWY 10R

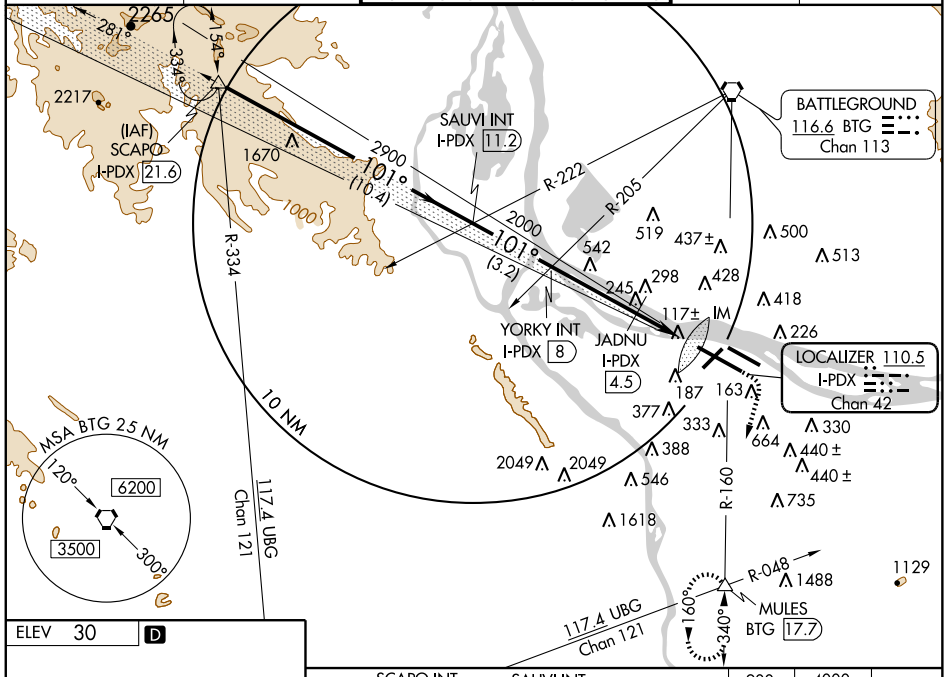
PORTLAND INTL (PDX)

When control tower reports construction equipment is operating within the area,
Cat II and III minimums not authorized.
For inoperative ALSF-2 increase S-ILS Cat E visibility to RVR 4000.
For inoperative ALSF-2 increase S-LOC Cat E visibility to 3 miles.
For inoperative ALSF-2 increase DME minimums S-LOC 10R Cat E visibility to RVR 6000.

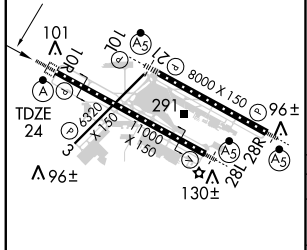
ALSF-2

MISSED APPROACH: Climb to 900, then climbing right turn to 4000 via BTG R-160 to MULES Int/BTG VORTAC 17.7 DME and hold.

ATIS	PORTLAND APP CON★	PORTLAND TOWER	GND CON	CLNC DEL
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8 / Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1

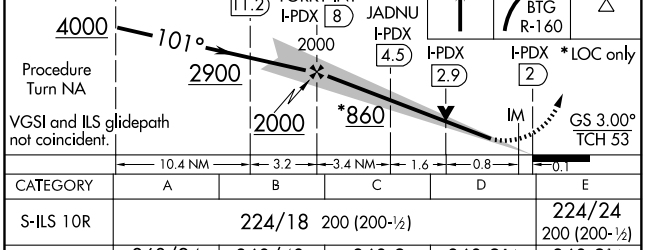


ELEV 30 D



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



CATEGORY	A	B	C	D	E
S-ILS 10R	224/18 200 (200-½)				224/24 200 (200-½)
S-LOC 10R	860/24 836 (900-½)	860/40 836 (900-¾)	860-2 836 (900-2)	860-2¼ 836 (900-2¼)	860-2½ 836 (900-2½)
CIRCLING	860-1 830 (900-1)	860-1¼ 830 (900-1¼)	860-2½ 830 (900-2½)	1020-3 990 (1000-3)	1060-3 1030(1100-3)
DME MINIMUMS					
S-LOC 10R	380/24 356 (400-½)			380/40 356 (400-¾)	
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)	1060-3 1030(1100-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

LOC/DME I-JMJ	APP CRS	Rwy Idg	11000
110.5	279°	TDZE	23
Chan 42		Apt Elev	30

ILS or LOC RWY 28L

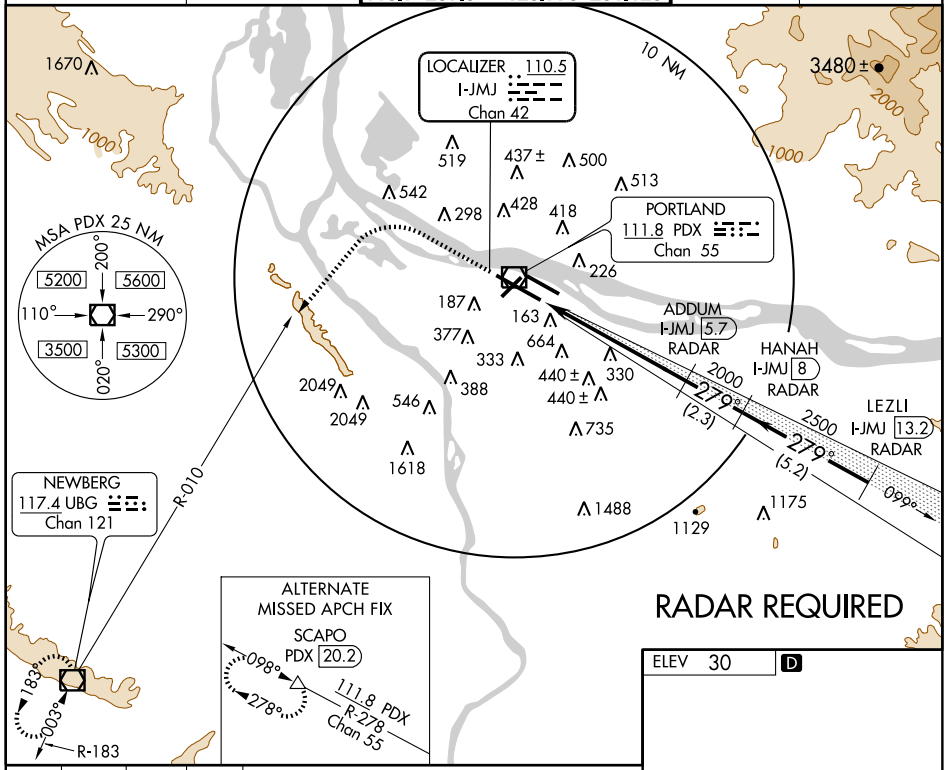
PORTLAND INTL (PDX)

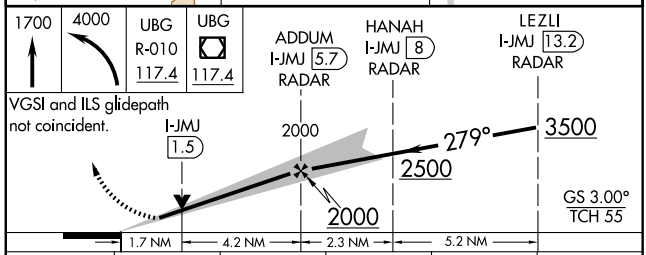
RADAR or DME required. For inoperative MALSR, increase S-ILS visibility to RVR 5000 all Cats and S-LOC Cat E visibility to 2 miles. Autopilot coupled approach NA below 580.

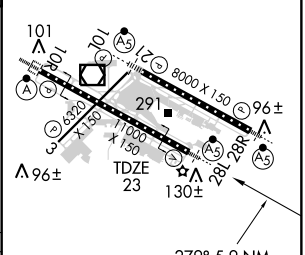
MALSR

MISSED APPROACH: Climb to 1700 then climbing left turn to 4000 via UBG R-010 to UBG VOR/DME and hold.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D	E
S-ILS-28L	306/24 283 (300-½)				
S-LOC-28L	620/24 597 (600-½)		620/50 597 (600-1)	620/60 597(600-1¼)	620-1½ 597(600-1½)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)	1060-3 1030(1100-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

LOC/DME I-HAP	APP CRS	Rwy Idg	8000
111.3	279°	TDZE	30
Chan 50		Apt Elev	30

ILS or LOC RWY 28R

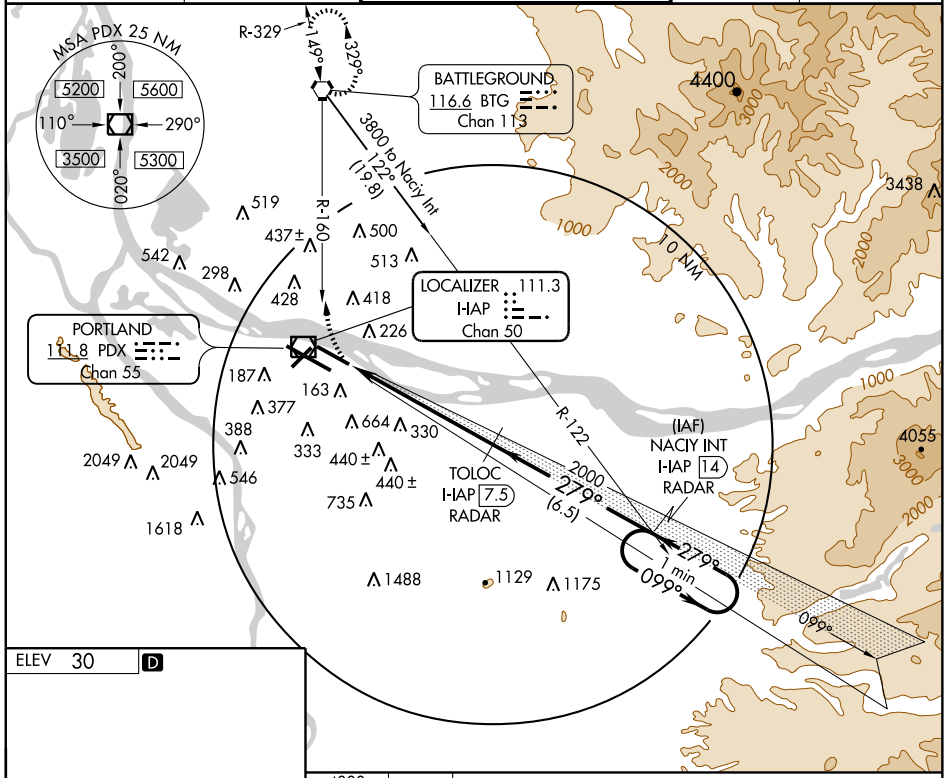
PORTLAND INTL (PDX)

Inoperative table does not apply to S-ILS all Cats.
For inoperative MALSR increase S-LOC Cat A and B visibility to 1.
Radar or DME required.

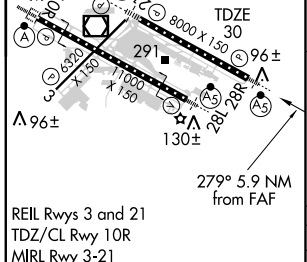
MALSR

MISSED APPROACH: Climbing right turn to 4000 via BTG R-160 to BTG VORTAC and hold.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1

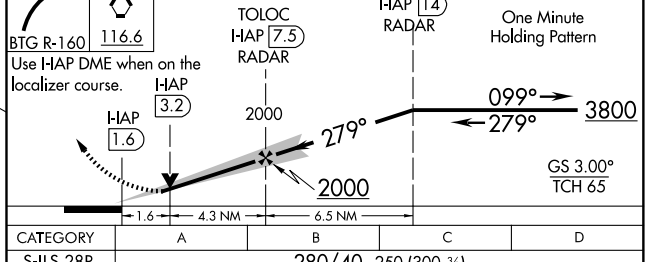


ELEV 30 D



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



CATEGORY	A	B	C	D
S-ILS 28R	280/40 250 (300-¾)			
S-LOC 28R	600/40 570 (600-¾)		600/50 570 (600-1)	600/60 570 (600-1¼)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

LOC/DME I-PDX	APP CRS	Rwy Idg 11000
110.5	101°	TDZE 24
Chan 42		Apt Elev 30

ILS RWY 10R (CAT II)

PORTLAND INTL (PDX)

When control tower reports construction equipment is operating within the area, Cat II and III minimums not authorized.

ALSF-2

MISSED APPROACH: Climb to 900, then climbing right turn to 4000 via BTG R-160 to MULES Int/BTG VORTAC 17.7 DME and hold.

ATIS	PORTLAND APP CON★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1

BATTLEGROUND 116.6 BTG Chan 113

SAUVI INT I-PDX 11.2

YORKY INT I-PDX 8

(IAF) SCAPO I-PDX 21.6

LOCALIZER 110.5 I-PDX Chan 42

MSA BTG 25 NM

120° 6200 3500 300°

10 NM

117.4 UBG Chan 121

MULES BTG 17.7

ELEV 30 D

TDZE 24

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

SCAPO INT I-PDX 21.6 — SAUVI INT I-PDX 11.2 — YORKY INT I-PDX 8 — Procedure Turn NA

4000 — 101° — 2900 — 2000

GS 3.00° TCH 53

VGSI and ILS glidepath not coincident

DA RA 107 24 MSL

10.4 NM — 3.2 — 5.8 NM — 897' — 1049'

CATEGORY	A	B	C	D
S-ILS 10R	RA 107/12 100 DA 124			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-PDX	APP CRS	Rwy Idg 11000
110.5	101°	TDZE 24
Chan 42		Apt Elev 30

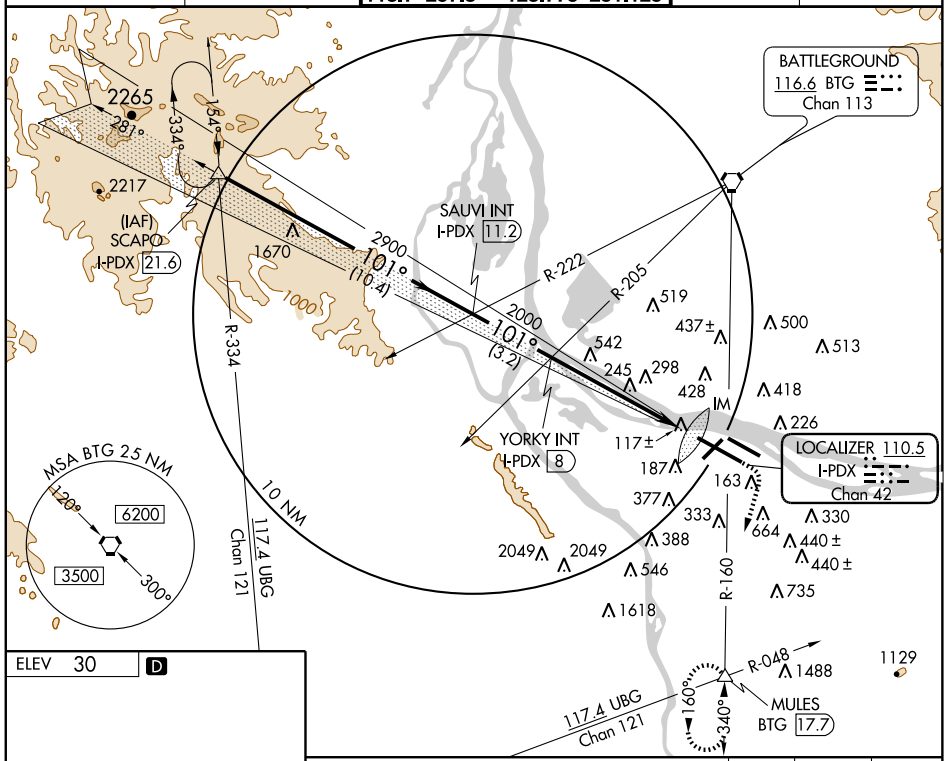
ILS RWY 10R (CAT III)
PORTLAND INTL (PDX)

When control tower reports construction equipment is operating within the area, Cat II and III minimums not authorized.

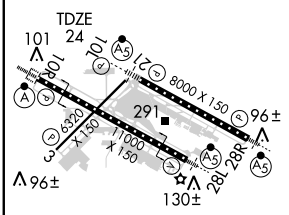
ALSF-2

MISSED APPROACH: Climb to 900, then climbing right turn to 4000 via BTG R-160 to MULES Int/BTG VORTAC 17.7 DME and hold.

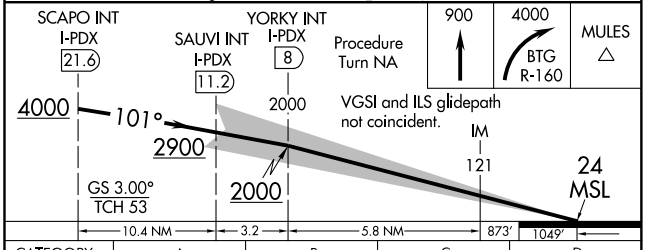
ATIS	PORTLAND APP CON★	PORTLAND TOWER	GND CON	CLNC DEL
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8 / Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1



ELEV 30 D



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L



CATEGORY	A	B	C	D
S-ILS 10R		CAT III a	RVR 07	
S-ILS 10R		CAT III b	RVR 06	
S-ILS 10R		CAT III c	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

NOTE: For non-GPS equipped aircraft departing Rwy 10R, 10L
UBG and BTG DMEs must be operational for Yakima Transition.
For non-GPS equipped aircraft departing Rwy 28R, 28L
UBG, BTG and MWH DMEs must be operational for the Pendleton Transition.

ATIS 128.35 269.9
CLNC DEL
120.125 318.1
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON ★
124.35 299.2 (280°-099°)

LAVAA TWO DEPARTURE (RNAV) (LAVAA2.LAVAA) 09351

SI-330 (FAA)

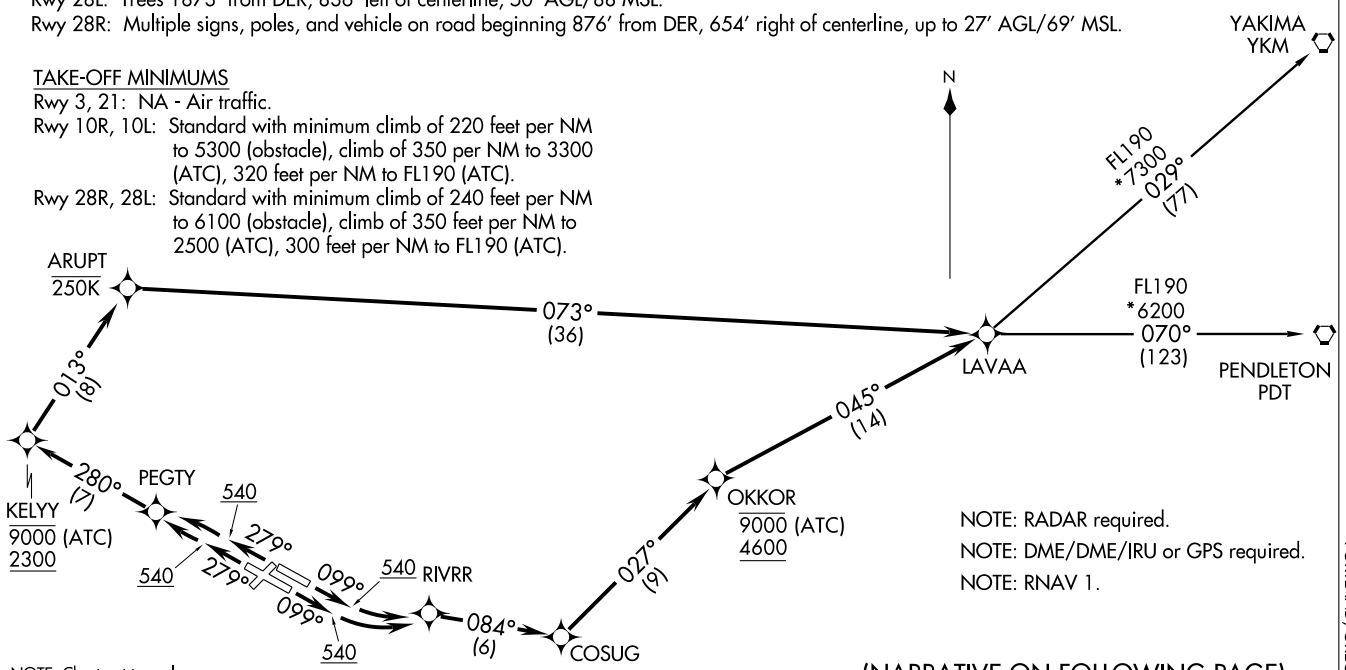
PORTLAND INTL (PDX)
PORTLAND, OREGON

TAKE-OFF OBSTACLE NOTES

Rwy 10L: Rising terrain and vehicles on road beginning 7′ from DER, 376′ left of centerline, up to 17′ AGL/60′ MSL.
Rwy 10R: Pole 1996′ from DER, 758′ right of centerline, 54′ AGL/74′ MSL.
Rwy 28L: Trees 1873′ from DER, 836′ left of centerline, 50′ AGL/88 MSL.
Rwy 28R: Multiple signs, poles, and vehicle on road beginning 876′ from DER, 654′ right of centerline, up to 27′ AGL/69′ MSL.

TAKE-OFF MINIMUMS

Rwy 3, 21: NA - Air traffic.
Rwy 10R, 10L: Standard with minimum climb of 220 feet per NM to 5300 (obstacle), climb of 350 per NM to 3300 (ATC), 320 feet per NM to FL190 (ATC).
Rwy 28R, 28L: Standard with minimum climb of 240 feet per NM to 6100 (obstacle), climb of 350 feet per NM to 2500 (ATC), 300 feet per NM to FL190 (ATC).



(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 10R: Climb heading 099° to 540, then left turn direct RIVRR, then via track 084° to COSUG, then via track 027° to cross OKKOR at or below 9000/4600, then via track 045° to LAVAA, thence....

TAKE-OFF RUNWAY 10L: Climb heading 099° to 540, then left turn direct RIVRR, then via track 084° to COSUG, then via track 027° to cross OKKOR at or below 9000/4600, then via track 045° to LAVAA, thence....

TAKE-OFF RUNWAY 28R: Climb heading 279° to 540, then left turn direct PEGTY, then via track 280° to cross KELYY at or below 9000/2300, then right turn via track 013° to ARUPT, then via track 073° to LAVAA, thence....

TAKE-OFF RUNWAY 28L: Climb heading 279° to 540, then right turn direct PEGTY, then via track 280° to cross KELYY at or below 9000/2300, then right turn via track 013° to ARUPT, then via track 073° to LAVAA, thence....

....via (Transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

PENDLETON TRANSITION (LAVAA2.PDT)

YAKIMA TRANSITION (LAVAA2.YKM)

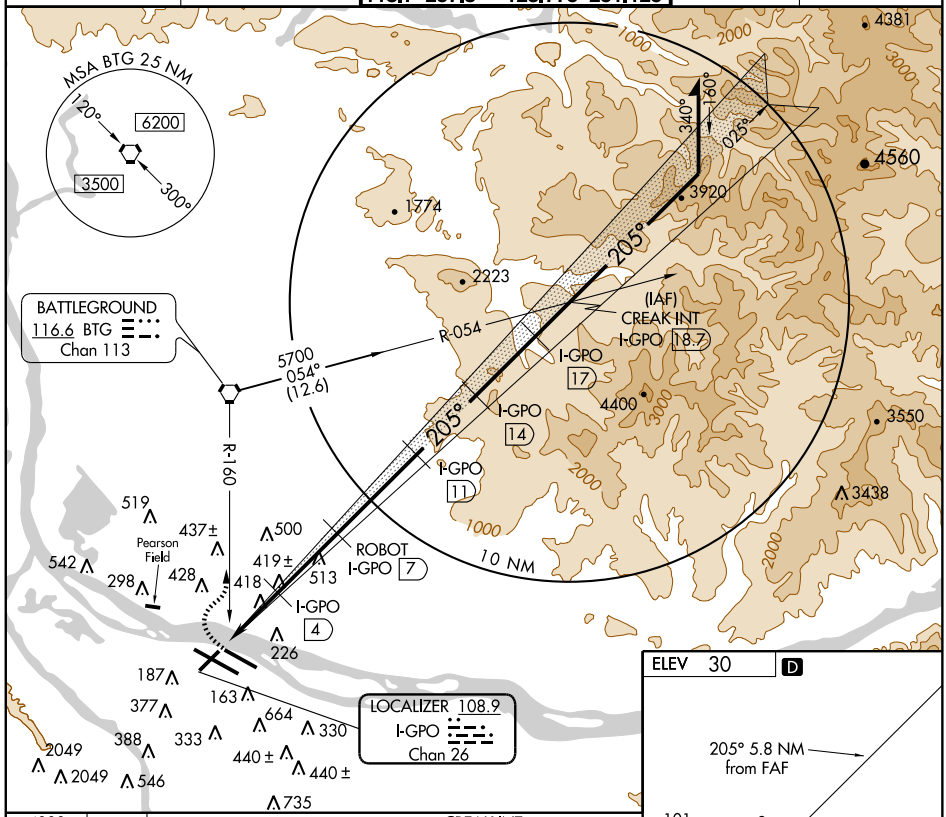
NW-1, 14 JAN 2010 to 11 FEB 2010

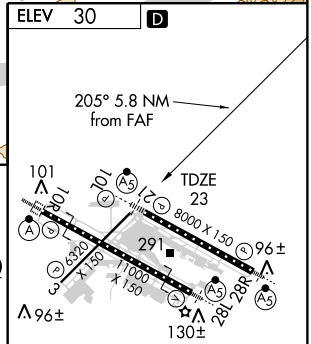
LOC/DME I-GPO	APP CRS	Rwy Idg	6320
108.9	205°	TDZE	23
Chan 26		Apt Elev	30

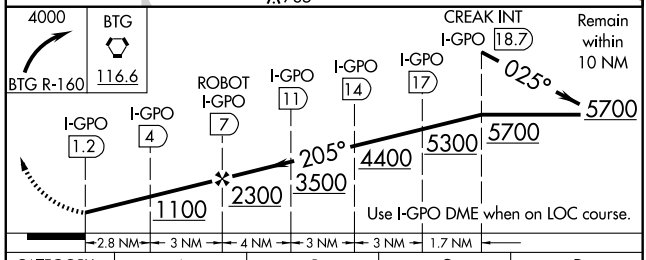
LOC/DME RWY 21
PORTLAND INTL (PDX)

MISSED APPROACH: Climbing right turn to 4000 via BTG R-160 to BTG VORTAC.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D
S-21	680-1 657 (700-1)		680-1¾ 657 (700-1¾)	680-2 657 (700-2)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

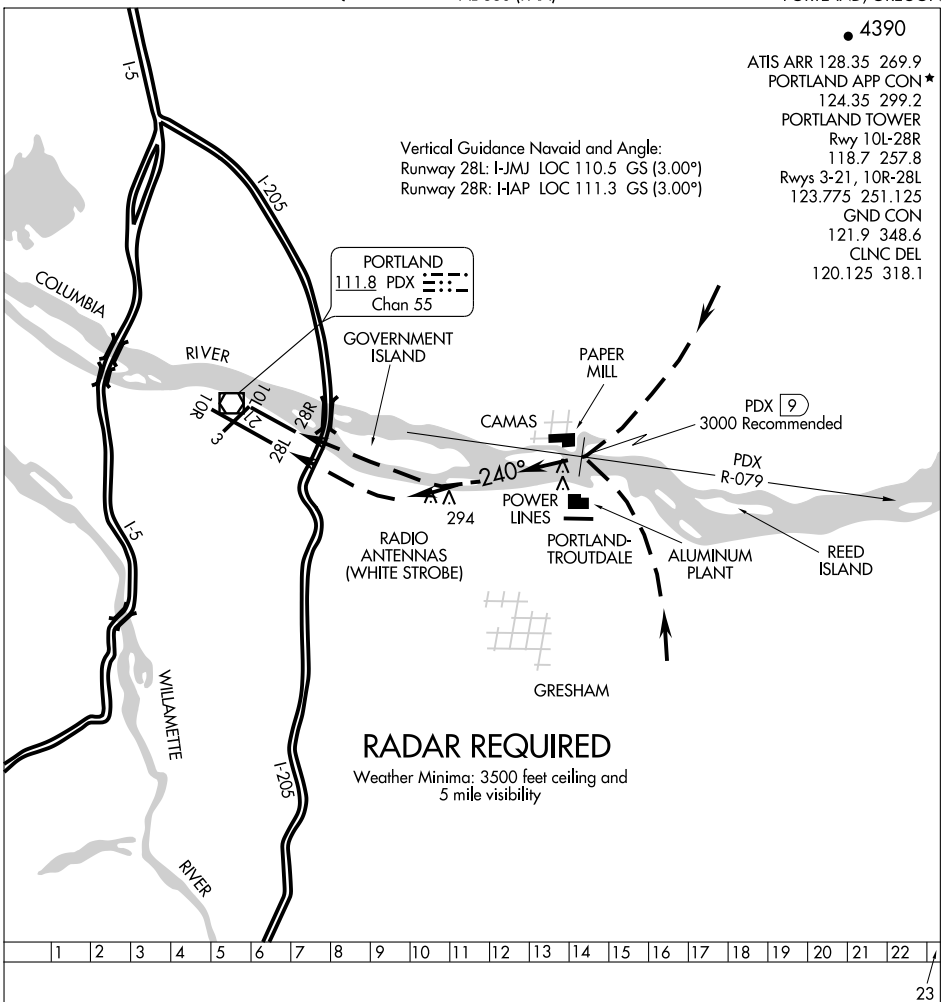
REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

MILL VISUAL RWY 28L/R

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

When visual approaches to Runways 28L/R are in progress, clearances to aircraft will be issued utilizing the following phraseology: "(IDENT) CLEARED FOR MILL VISUAL RUNWAY 28 LEFT/RIGHT APPROACH."

(MINNE2.MINNE) 09351

MINNE TWO DEPARTURE (RNAV)

SL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

ATIS 128.35 269.9
CLNC DEL
120.125 318.1
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON ★
124.35 299.2 (280°-099°)

KELYY
9000 (ATC)
1900

DUDRE

233° (5)

280° (7)

PEGTY

540

279°

540

279°

099°

540

RIVRR

099°

540

084° (6)

COSUG

155° (7)

171° (25)

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.

BISLE
9000 (ATC)
3500

230° (32)

MINNE

NOTE: For non-GPS equipped aircraft departing Rwy 10R, 10L UBG and BTG DMEs must be operational.
For non-GPS equipped aircraft departing Rwy 28R, 28L ONP DME must be operational.

TAKE-OFF OBSTACLE NOTES

Rwy 10L: Rising terrain and vehicles on road beginning 7′ from DER, 376′ left of centerline, up to 17′ AGL/60′ MSL.
Rwy 10R: Pole 1996′ from DER, 758′ right of centerline, 54 AGL/74′ MSL.
Rwy 28L: Trees 1873′ from DER, 836′ left of centerline, 50′ AGL/88′ MSL.
Rwy 28R: Multiple signs, poles, and vehicle on road beginning 876′ from DER, 654′ right of centerline, up to 27′ AGL/69′ MSL.

FL230 *4300 176° (47)

FL230 *3500 166° (45)

FL230 *3700 155° (45)

TAKE-OFF MINIMUMS

Rwy 3, 21: NA - Air traffic.
Rwy 10R, 10L: Standard with minimum climb of 350 feet per NM to 3300 (ATC), 300 feet per NM to 13000 (ATC).
Rwy 28R, 28L: Standard with minimum climb of 350 feet per NM to 2500 (ATC), 300 feet per NM to 15000 (ATC).

EASON

FAMUK

HISKU

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NW-1, 14 JAN 2010 to 11 FEB 2010

MINNE TWO DEPARTURE (RNAV) SL-330 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 10R: Climb heading 099° to 540, then left turn direct to RIVRR, then via track 084° to COSUG, then via track 155° to cross BISLE at or below 9000/3500, then via track 230° to MINNE, thence....

TAKE-OFF RUNWAY 10L: Climb heading 099° to 540, then left turn direct RIVRR, then via track 084° to COSUG, then via track 155° to cross BISLE at or below 9000/3500, then via track 230° to MINNE, thence....

TAKE-OFF RUNWAY 28R: Climb heading 279° to 540, then left turn direct PEGTY, then via track 280° to cross KELYY at or below 9000/1900, then via track 233° to DUDRE, then via track 171° to MINNE, thence....

TAKE-OFF RUNWAY 28L: Climb heading 279° to 540, then right turn direct PEGTY, then via track 280° to cross KELYY at or below 9000/1900, then via track 233° to DUDRE, then via track 171° to MINNE, thence....

....via (Transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

EASON TRANSITION (MINNE2.EASON)

FAMUK TRANSITION (MINNE2.FAMUK)

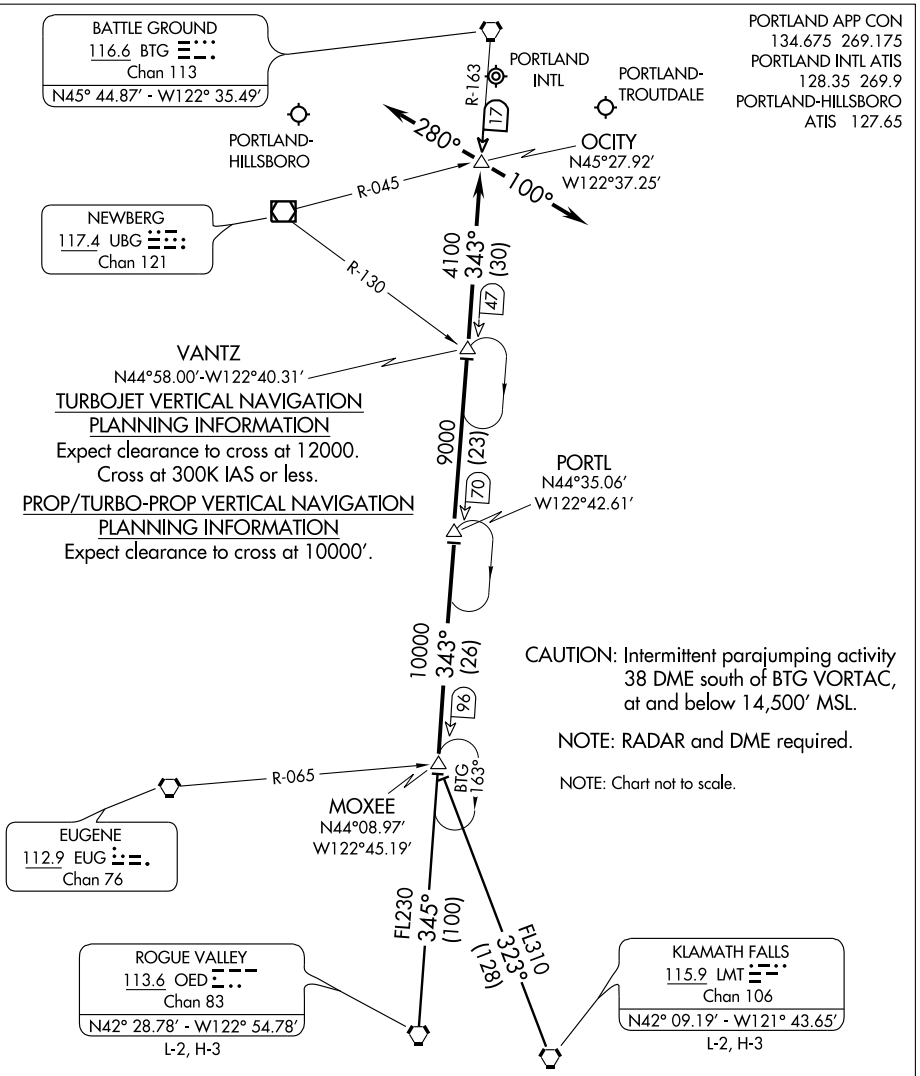
HISKU TRANSITION (MINNE2.HISKU)

NW-1, 14 JAN 2010 to 11 FEB 2010

MOXEE SIX ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



KLAMATH FALLS TRANSITION (LMT.MOXEE6): From over LMT VORTAC via LMT R-323 to MOXEE INT. Thence . . . .

ROGUE VALLEY TRANSITION (OED.MOXEE6): From over OED VORTAC via OED R-345 to MOXEE INT. Thence . . . .

. . . . From over MOXEE INT via BTG R-163 to OCITY INT. Thence via:

Landing East - Depart OCITY INT heading 280° for vectors to final approach course.

Landing West - Depart OCITY INT heading 100° for vectors to final approach course.

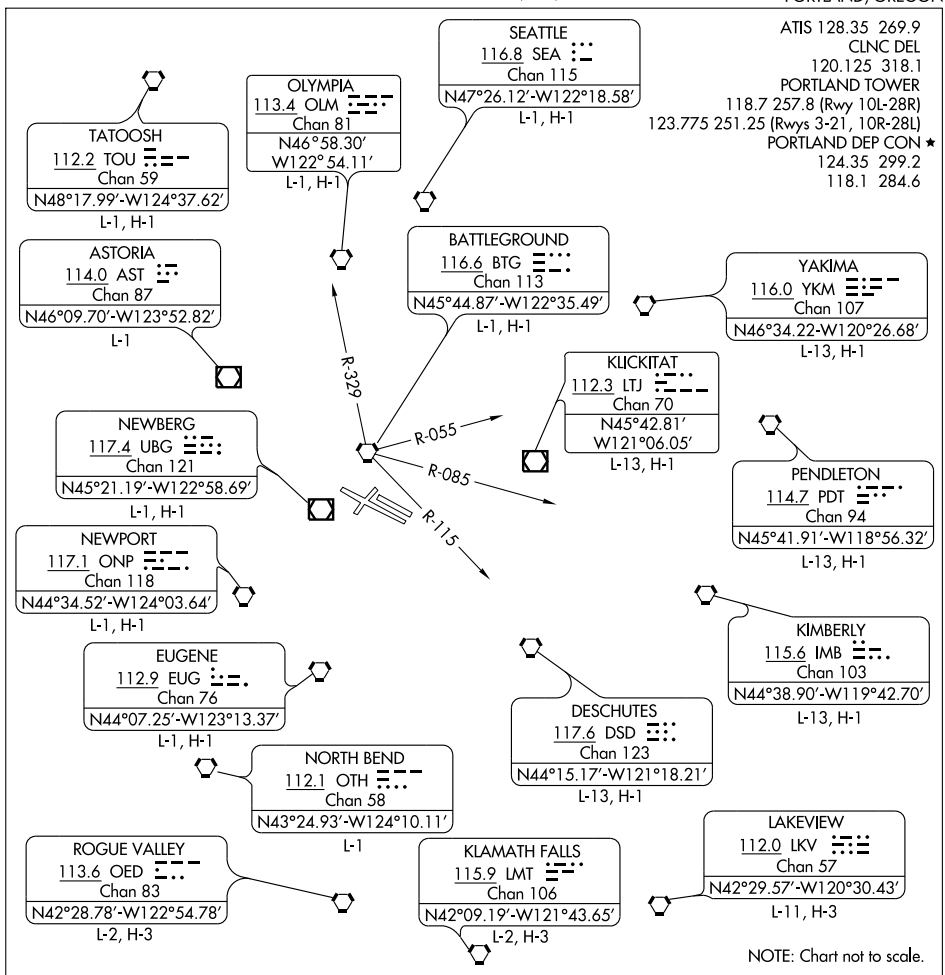
LOST COMMUNICATIONS: After OCITY INT, proceed direct BTG VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND SIX DEPARTURE

SL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



TAKE-OFF MINIMUMS:
Rwy 3: Standard with minimum climb of 400′ per NM to 2700.
Rwy 21: Standard with minimum climb of 450′ per NM to 2900.
Rwy 10R: Standard with minimum climb of 375′ per NM to 2700.
Rwy 10L: Standard with minimum climb of 350′ per NM to 2700.
Rwy 28L: Standard with minimum climb of 375′ per NM to 2900.
Rwy 28R: Standard with minimum climb of 350′ per NM to 2900.

NOTE: RADAR REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND SIX DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climb heading 025° to 600 thence....
TAKE-OFF RWY 10L: Climb heading 099° to 500 thence...
TAKE-OFF RWY 10R: Climb heading 099° to 500 thence....
TAKE-OFF RWY 28L: Climb heading 279° to 800 thence....
TAKE-OFF RWY 28R: Climb heading 279° to 800 thence....
TAKE-OFF RWY 21: Climb heading 205° to 500 thence....
....via assigned heading expect radar vectors to assigned route/fix. Maintain 3000, expect filed altitude five minutes after departures.

LOST COMMUNICATIONS: If no contact with ATC within 10 NM of airport, continue climb to assigned altitude and proceed direct BTG VORTAC. Continue climb via BTG R-329 within 10 NM to cross BTG VORTAC: BTG R-355 clockwise R-055 or R-085 clockwise R-115 at or above 5000 feet. Continue climb on course.

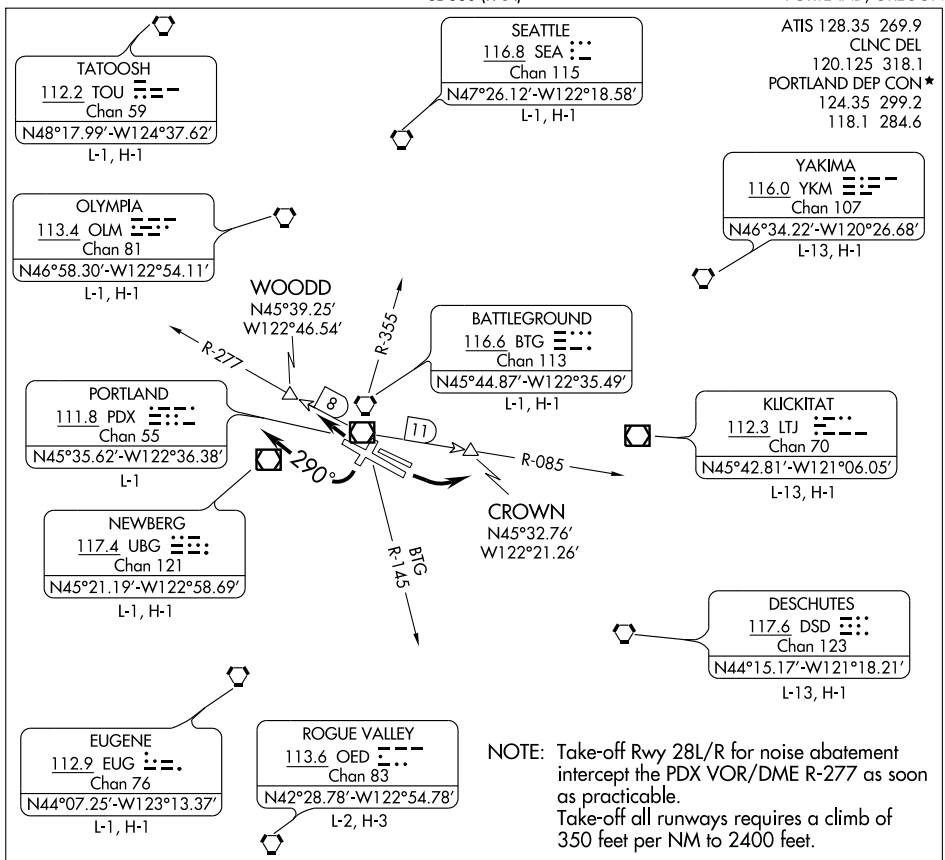
TAKE-OFF OBSTACLE NOTES:
Rwy 3: Signs, tower, trees, and vehicle on road beginning 468′ from DER, 28′ left of centerline, up to 100′ AGL/449′ MSL.
Poles, trees, and vehicle on road beginning 609′ from DER, 7′ left of centerline, up to 100′ AGL/416′ MSL.
Rwy 10L: Rising terrain and vehicle on road beginning 7′ from DER, 376′ left of centerline, up to 17′ AGL/60′ MSL.
Rwy 10R: Pole 1996′ from DER, 758′ right of centerline, 54′ AGL/74′ MSL.
Rwy 21: Trees beginning 1319′ from DER, 155′ right of centerline, up to 100′ AGL/318′ MSL.
Poles and trees beginning 353′ from DER, 36′ left of centerline, up to 100′ AGL/317′ MSL.
Rwy 28L: Trees 1873′ from DER, 836′ left of centerline, 50′ AGL/88′ MSL.
Rwy 28R: Multiple signs, poles, and vehicle on road beginning 876′ from DER, 654′ right of centerline, up to 27′ AGL/69′ MSL.

NW-1, 14 JAN 2010 to 11 FEB 2010

RIVER SIX DEPARTURE

SL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



NOTE: Take-off Rwy 28L/R for noise abatement intercept the PDX VOR/DME R-277 as soon as practicable.
Take-off all runways requires a climb of 350 feet per NM to 2400 feet.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 10L/R: Turn left, intercept and proceed via the PDX R-085 or as assigned, expect radar vectors to assigned route. Expect filed alitutude/ flight level 5 minutes after departure.

TAKE-OFF RUNWAY 21: Turn right fly heading 290° or as assigned, expect radar vectors on course. Expect filed altitude/flight level 5 minutes after departure.

TAKE-OFF RUNWAYS 28L/R: Intercept and proceed via the PDX R-277 or as assigned, expect radar vectors to assigned route. Expect filed alittude/flight level 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC within 10 NM of airport or leaving 3,000', continue climb to assigned altitude and proceed direct to BTG VORTAC, thence via (assigned route). If proceeding via BTG VORTAC R-355 CW R-145, a 340 feet per NM climb is required to 13800 feet.

ALTERNATE LOST COMMUNICATIONS: When BTG VORTAC is out of service: If no contact with ATC leaving 3,000', continue climb to assigned altitude direct UBG VOR/DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

WAAS	APP CRS	Rwy Idg	8000
CH 81804	099°	TDZE	30
W10B		Apt Elev	30

RNAV (GPS) RWY 10L

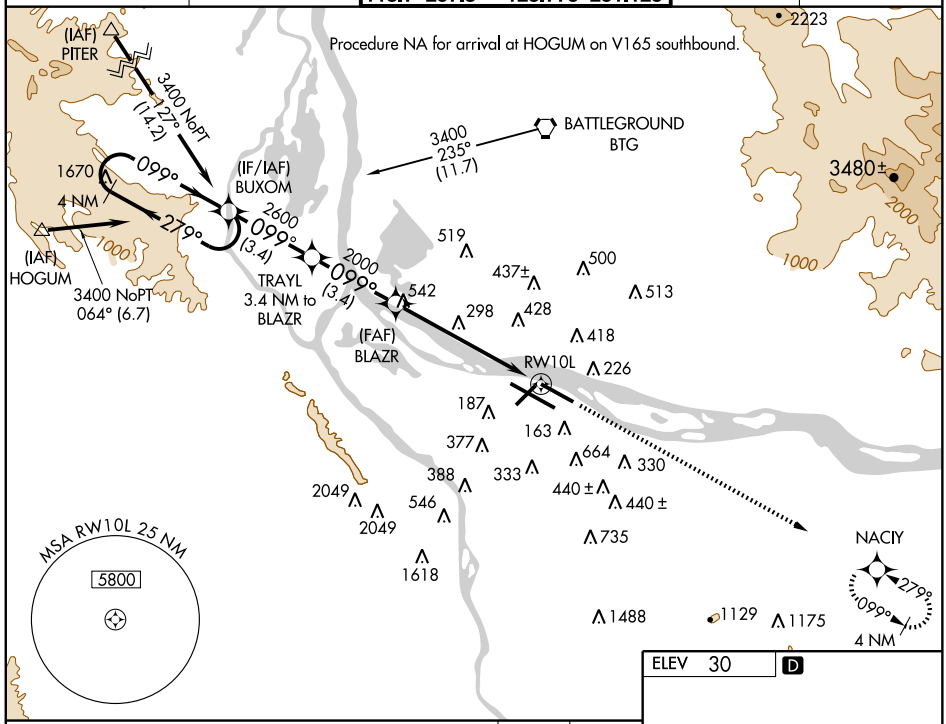
PORTLAND INTL (PDX)

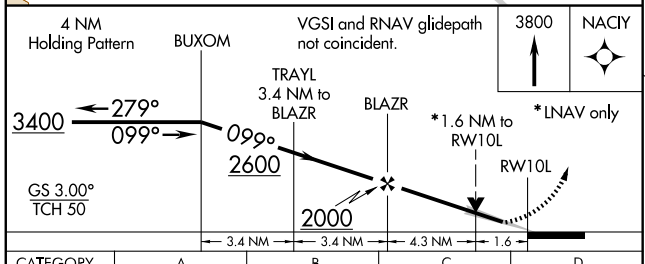
DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

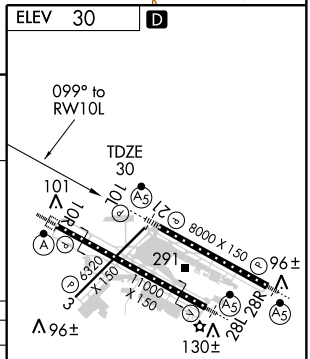
MALSR

MISSED APPROACH: Climb to 3800 direct NACIY WP and hold.

ATIS	PORTLAND APP CON*	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D
LPV DA	330/24 300 (300-½)			
LNAV/VNAV DA	800-2¼ 770 (800-2¼)			800-2½ 770 (800-2½)
LNAV MDA	580/24 550 (600-½)		580/50 550 (600-1)	580/60 550 (600-1¼)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

WAAS CH 40004 W10A	APP CRS 099°	Rwy Idg 11000 TDZE 24 Apt Elev 30

RNAV (GPS) RWY 10R

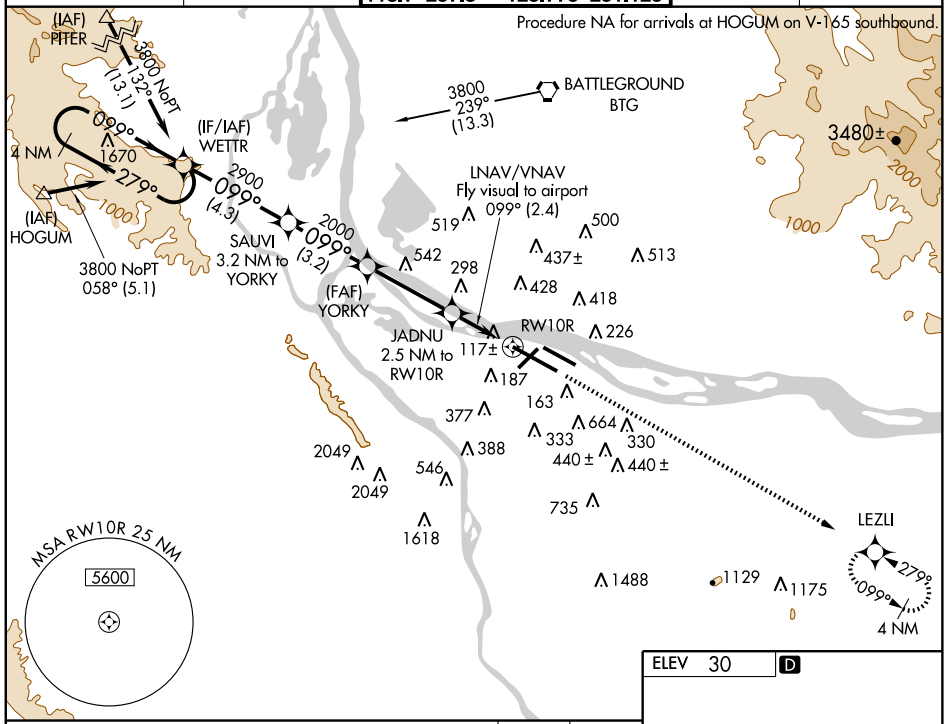
PORTLAND INTL (PDX)

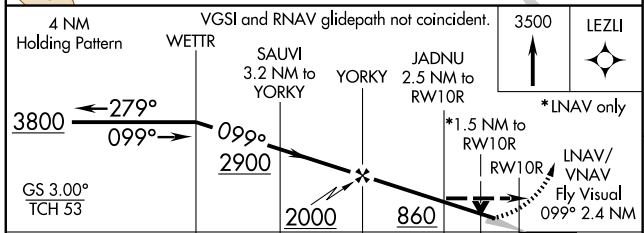
DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (4F).
Inoperative table does not apply to LNAV/VNAV all Cats.
For inoperative ALSF-2 increase LPV visibility to RVR 6000.

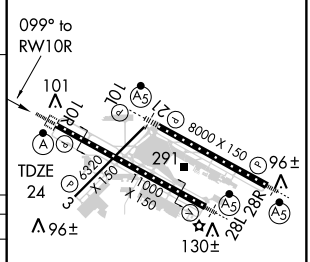
ALSF-2

MISSED APPROACH: Climb to 3500 direct LEZLI and hold.

ATIS	PORTLAND APP CON *	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D
LPV DA	390/40 366 (400-¾)			
LNAV/VNAV DA	660-2 636 (700-2)			
LNAV MDA	540/24 516 (600-½)		540/50 516 (600-1)	540/60 516 (600-1¼)
CIRCLING	720-5 690 (700-5)	740-5 710 (800-5)		1020-5 990 (1000-5)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

WAAS	APP CRS	Rwy Idg	11000
CH 56205	279°	TDZE	23
W28B		Apt Elev	30

RNAV (GPS) RWY 28L

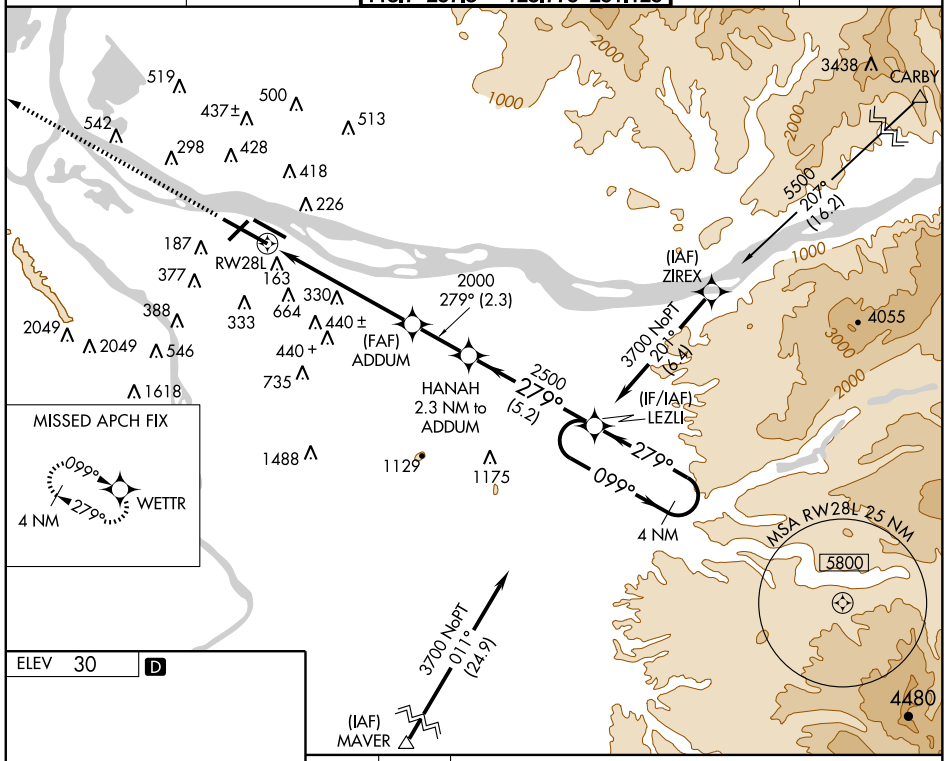
PORTLAND INTL (PDX)

DME/DME RNP-0.3 NA.

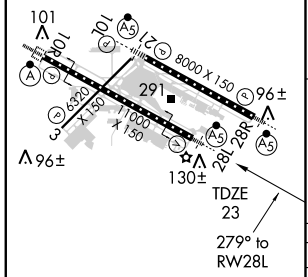
MALSR

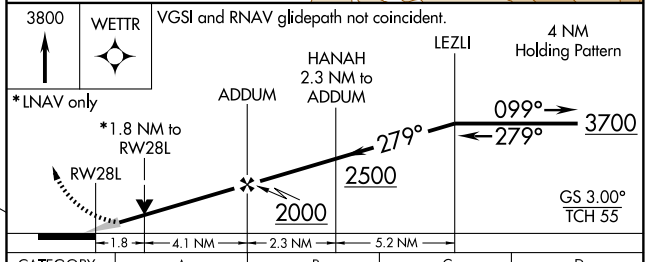
MISSED APPROACH: Climb to 3800 direct WETTR and hold.

ATIS	PORTLAND APP CON*	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1



ELEV 30 D





CATEGORY	A	B	C	D
LPV DA	340/24 317 (400-½)			
LNAV MDA	660/24 637 (700-½)		660/60 637 (700-1¼)	660-1½ 637 (700-1½)
CIRCLING	720-1½ 690 (700-1½)	740-1½ 710 (800-1½)	740-2 710 (800-2)	1020-3 990 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

PORTLAND, OREGON

AL-330 (FAA)

WAAS	APP CRS	Rwy Idg	8000
CH 60905	279°	TDZE	30
W28A		Apt Elev	30

RNAV (GPS) RWY 28R

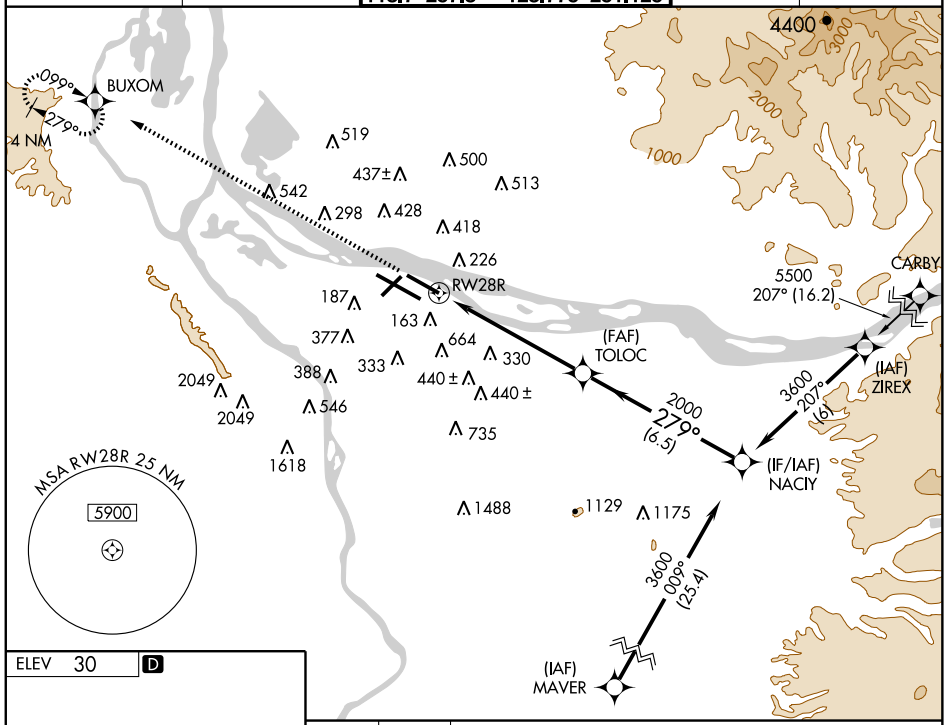
PORTLAND INTL (PDX)

DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (4°F).
For inoperative MALSR increase LNAV Cat A and B visibility to RVR 5000.
For inoperative MALSR increase LPV visibility to RVR 5000 all Cats.

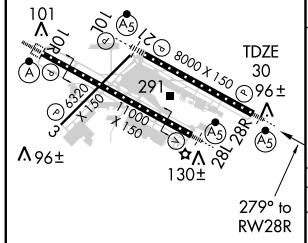
MALSR

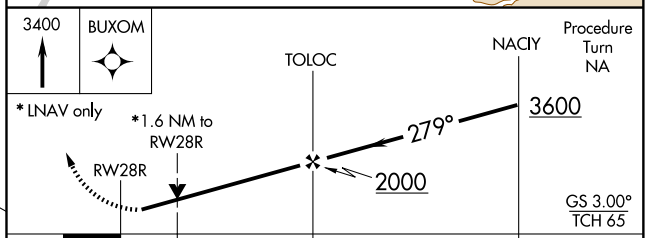
MISSED APPROACH: Climb to 3400 direct BUXOM and hold.

ATIS	PORTLAND APP CON *	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1



ELEV 30 D





CATEGORY	A	B	C	D
LPV DA	320/40 290 (300-¾)			
LNAV/VNAV DA	540/60 510 (600-1¼)			
LNAV MDA	600/40 570 (600-¾)		600/50 570 (600-1)	600/60 570 (600-1¼)
CIRCLING	720-1¾ 690 (700-1¾)	740-1¾ 710 (800-1¾)	740-2 710 (800-2)	1020-3 990 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 28L

TACAN CBU Chan 29	APCH CRS 277°	Rwy ldg 11,000 TDZE 23 Arpt Elev 30

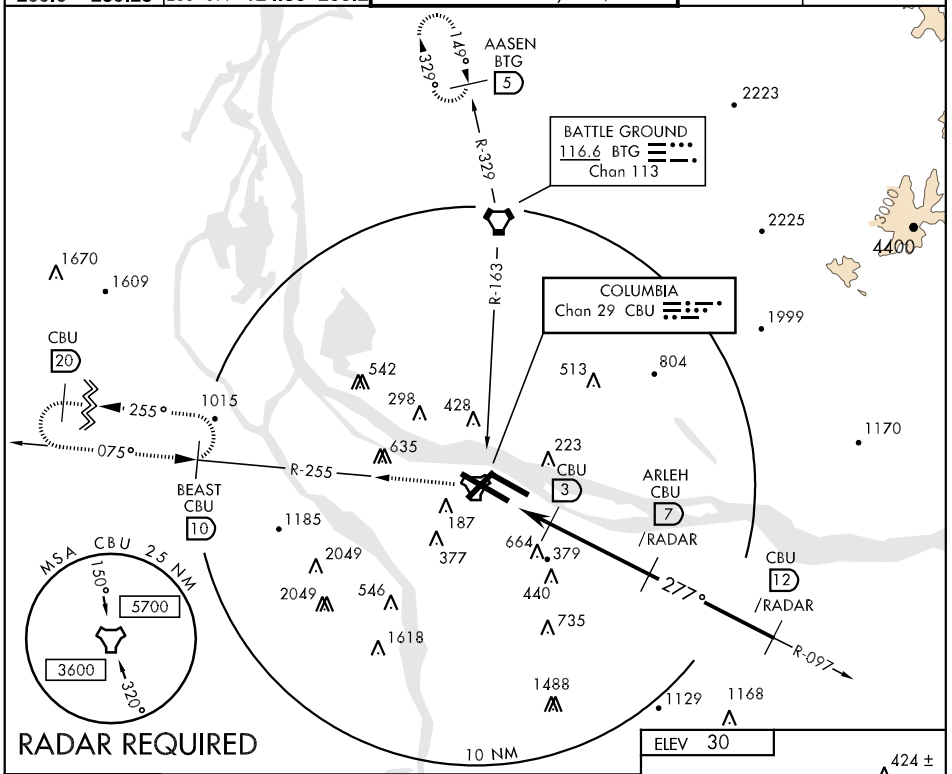
AL-330 [USAF]

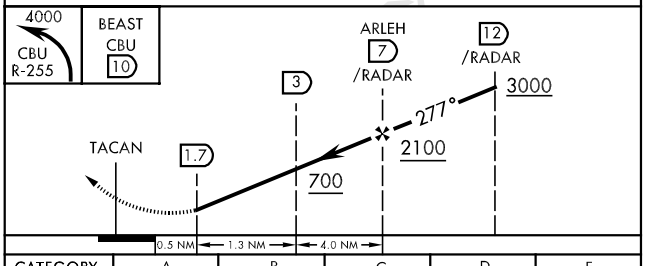
PORTLAND INTL (KPDX)

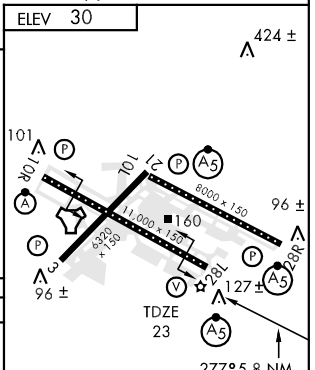
MALSR

MISSED APPROACH: Climbing left turn to 4000 via CBU R-255 to BEAST INT/CBU 10 DME and hold, or when directed by ATC climb to 4000 via BTG R-163 to BTG VORTAC then via BTG R-329 to AASEN INT and hold.

ARR ATIS DEP	PORTLAND APP CON	PORTLAND TOWER	GND CON	CLNC DEL
128.35 120.625 269.9 239.25	100°-279° 118.1 284.6 280°-099° 124.35 299.2	118.7 257.8 Rwy 10L-28R 123.775 251.125 Rwy 3-21, 10R-28L	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D	E
S-28L	600/50 577 (600-1)		600-1½ 577 (600-1½)	600-1¾ 577 (600-1¾)	600-2 577 (600-2)
CIRCLING	720-1 690 (700-1)		740-2 710 (800-2)	980-3 950 (1000-3)	1060-3 1030 (1100-3)

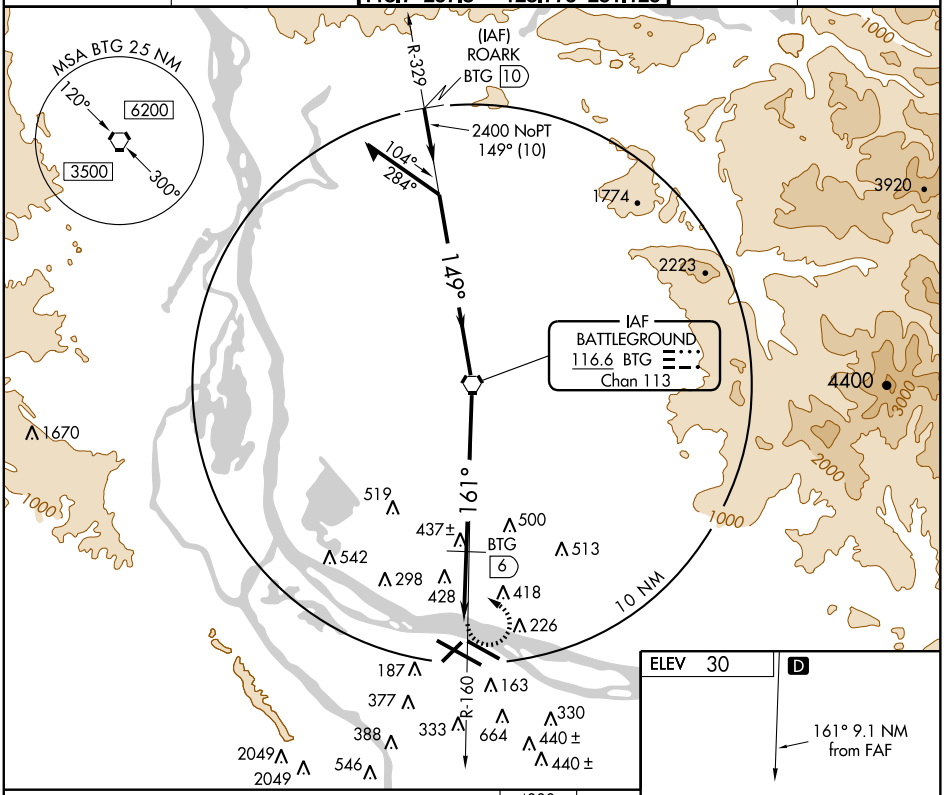
REIL Rwy 3-21
TDZL/CL 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R , 28L-10R

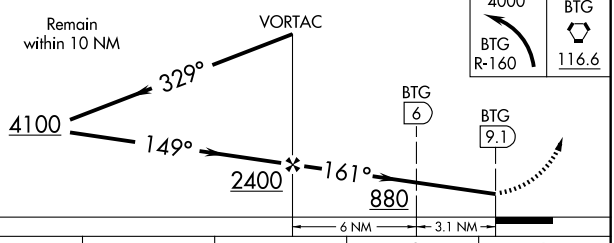
VORTAC BTG	APP CRS	Rwy Idg	N/A
116.6	161°	TDZE	N/A
Chan 113		Apt Elev	30

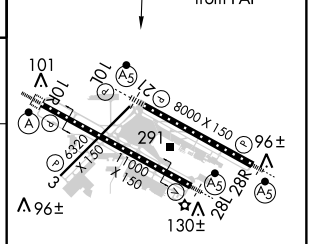
VOR-A
PORTLAND INTL (PDX)

MISSED APPROACH: Climbing left turn to 4000 via BTG R-160 to BTG VORTAC.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

CATEGORY	A	B	C	D
CIRCLING	880-1 850 (900-1)	880-1¼ 850 (900-1¼)	880-2½ 850 (900-2½)	1020-3 990 (1000-3)
DME MINIMA				
CIRCLING	740-1 710 (800-1)		740-2 710 (800-2)	1020-3 990 (1000-3)

FAF to MAP 9.1 NM

Knots	60	90	120	150	180
Min:Sec	9:06	6:04	4:33	3:38	3:02

NW-1, 14 JAN 2010 to 11 FEB 2010

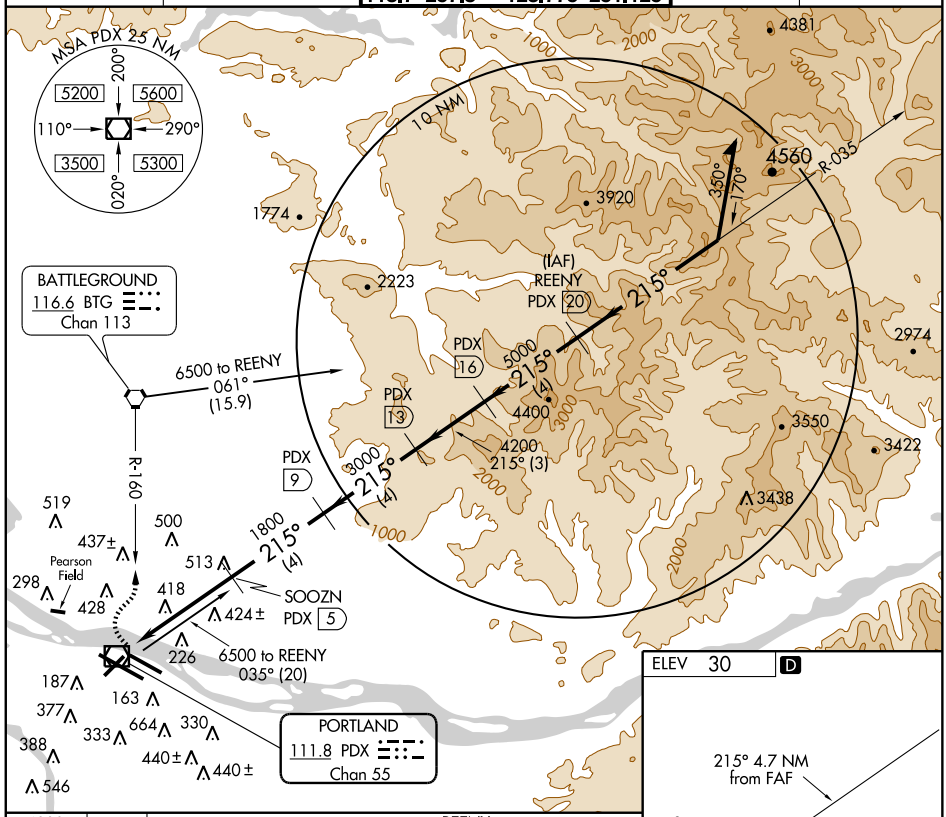
VOR/DME PDX	APP CRS	Rwy Idg	6320
111.8	215°	TDZE	27
Chan 55		Apt Elev	30

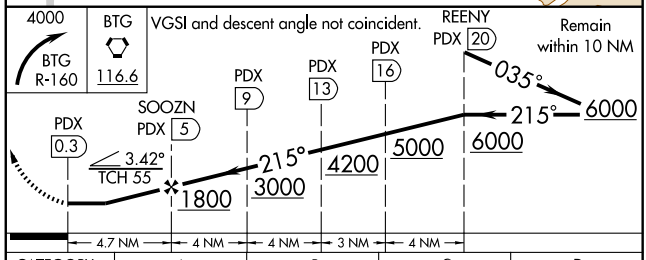
VOR/DME RWY 21
PORTLAND INTL (PDX)

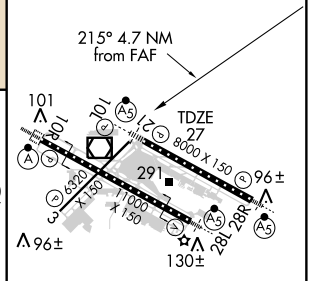
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 4000 via BTG R-160 to BTG VORTAC.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1







CATEGORY	A	B	C	D
S-21	720-1 693 (700-1)		720-2 693 (700-2)	720-2¼ 693 (700-2¼)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME PDX	APP CRS	Rwy Idg	8000
111.8	272°	TDZE	26
Chan 55		Apt Elev	30

VOR RWY 28R
PORTLAND INTL (PDX)

T A — Inoperative table applies only to Cat. C and D.

MALSR

MISSED APPROACH: Climbing right turn to 4000 via BTG R-160 to BTG VORTAC.

ATIS	PORTLAND APP CON ★	PORTLAND TOWER		GND CON	CLNC DEL
		Rwy 10L-28R	Rwys 3-21, 10R-28L		
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1

BATTLEGROUND 116.6 BTG Chan 113

PORTLAND 111.8 PDX Chan 55

NEWBERG 117.4 UBG Chan 121

NAOMI INT PDX 6

(IAF) ENGLL INT PDX 11

R-160 R-136 R-123 R-092 R-039

MSA BTG 25 NM: 120°–300° 6200 3500

10 NM

RADAR REQUIRED

ELEV 30 D

TDZE 26

8000 X 150

6320 X 150

11000 X 150

28L 28R

272° 4.3 NM from FAF

4000 BTG R-160

BTG 116.6

NAOMI INT PDX 6

ENGLL INT PDX 11

272° 3000 1700

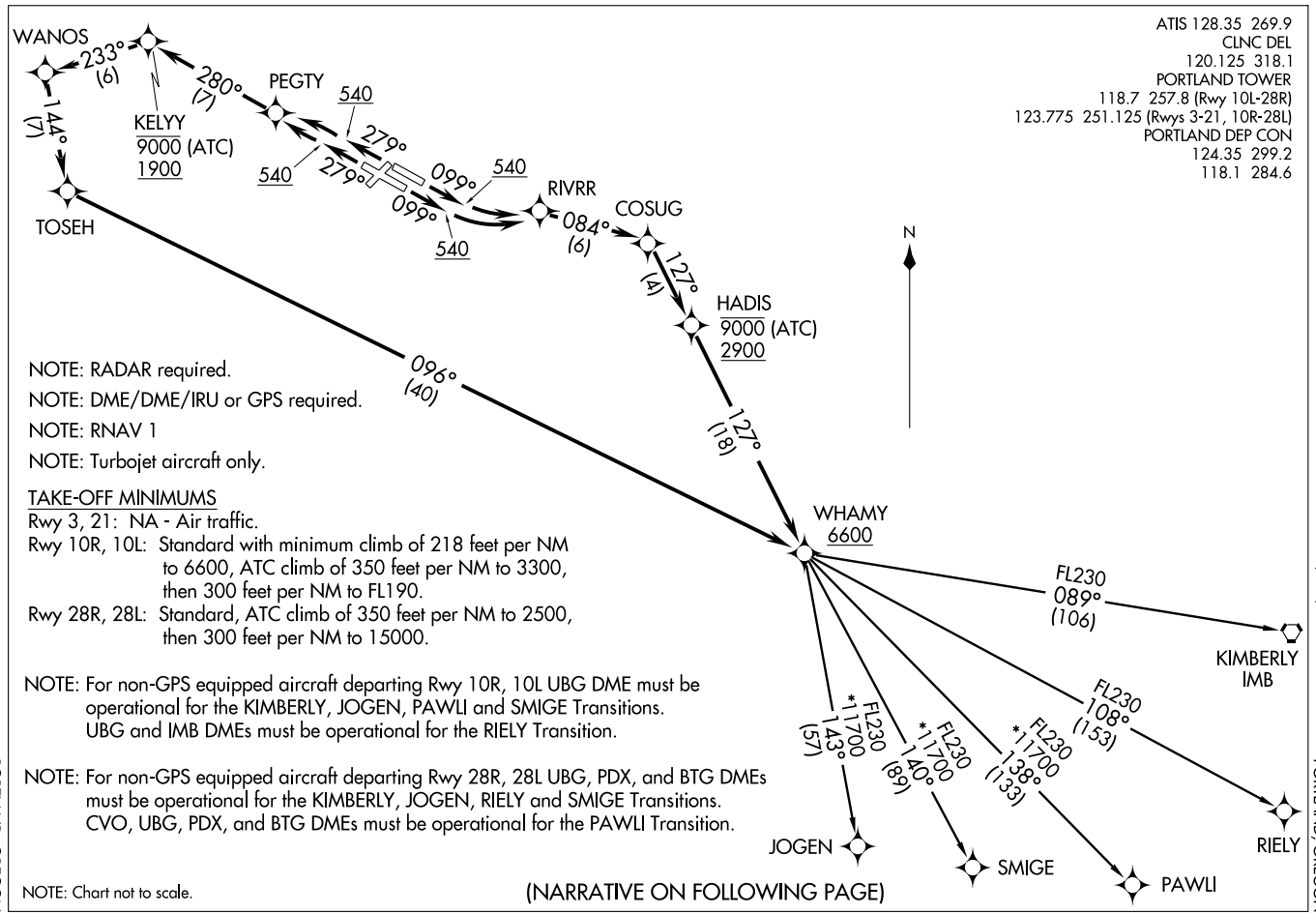
VOR/DME

1.7 4.3 NM 5 NM

CATEGORY	A	B	C	D
S-28R	600/50 574 (600-1)			600/60 574 (600-1¼)
CIRCLING	720-1 690 (700-1)	740-1 710 (800-1)	740-2 710 (800-2)	1020-3 990 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 14 JAN 2010 to 11 FEB 2010


WANOS
233°
(6)
144°
(7)
KELYY
9000 (ATC)
1900
280°
(7)
PEGTY
540
279°
540
279°
540
099°
099°
540
540
RIVRR
084°
(6)
COSUG
127°
(4)
HADIS
9000 (ATC)
2900
TOSEH
096°
(40)
127°
(18)
WHAMY
6600
FL230
089°
(106)
KIMBERLY
IMB
FL230
*11700
143°
(57)
FL230
*11700
140°
(89)
FL230
*11700
138°
(133)
FL230
108°
(153)
JOGEN
SMIGE
PAWLI
RIELY
N
ATIS 128.35 269.9
CLNC DEL
120.125 318.1
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
124.35 299.2
118.1 284.6
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1
NOTE: Turbojet aircraft only.
TAKE-OFF MINIMUMS
Rwy 3, 21: NA - Air traffic.
Rwy 10R, 10L: Standard with minimum climb of 218 feet per NM to 6600, ATC climb of 350 feet per NM to 3300, then 300 feet per NM to FL190.
Rwy 28R, 28L: Standard, ATC climb of 350 feet per NM to 2500, then 300 feet per NM to 15000.
NOTE: For non-GPS equipped aircraft departing Rwy 10R, 10L UBG DME must be operational for the KIMBERLY, JOGEN, PAWLI and SMIGE Transitions. UBG and IMB DMEs must be operational for the RIELY Transition.
NOTE: For non-GPS equipped aircraft departing Rwy 28R, 28L UBG, PDX, and BTG DMEs must be operational for the KIMBERLY, JOGEN, RIELY and SMIGE Transitions. CVO, UBG, PDX, and BTG DMEs must be operational for the PAWLI Transition.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
(WHAMY1.WHAMY) 09295
WHAMY ONE DEPARTURE (RNAV)
SL-330 (FAA)
PORTLAND INTL (PDX)
PORTLAND, OREGON

WHAMY ONE DEPARTURE (RNAV) SL-330 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 10R: Climb heading 099° to 540 feet, then left turn direct RIVRR, and via 084° track to COSUG, and via 127° track to cross HADIS at or below 9000 (ATC)/2900, then via 127° track to WHAMY, cross WHAMY at or above 6600, thence....

TAKE-OFF RUNWAY 10L: Climb heading 099° to 540 feet, then left turn direct RIVRR, and via 084° track to COSUG, and via 127° track to cross HADIS at or below 9000 (ATC)/2900, then via 127° track to WHAMY, cross WHAMY at or above 6600, thence....

TAKE-OFF RUNWAY 28R: Climb heading 279° to 540 feet, then left turn direct PEGTY, and via 280° track to cross KELYY at or below 9000 (ATC)/1900, then via track 233° to WANOS, and via 144° track to TOSEH, and via 096° track to WHAMY, cross WHAMY at or above 6600, thence....

TAKE-OFF RUNWAY 28L: Climb heading 279° to 540 feet, then right turn direct PEGTY, and via 280° track to cross KELYY at or below 9000 (ATC)/1900, then via track 233° to WANOS, and via 144° track to TOSEH, and via 096° track to WHAMY, cross WHAMY at or above 6600, thence....

....via (Transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

JOGEN TRANSITION (WHAMY1.JOGEN)

KIMBERLY TRANSITION (WHAMY1.IMB)

PAWLI TRANSITION (WHAMY1.PAWLI)

RIELY TRANSITION (WHAMY1.RIELY)

SMIGE TRANSITION (WHAMY1.SMIGE)

TAKE-OFF OBSTACLE NOTES

Rwy 10L: Rising terrain and vehicle on road beginning 7' from DER, 376' left of centerline, up to 17' AGL/60' MSL.
Rwy 10R: Pole 1996' from DER, 758' right of centerline, 54' AGL/74' MSL
Rwy 28L: Trees 1873' from DER, 836' left of centerline, 50' AGL/88' MSL.
Rwy 28R: Multiple signs, poles, and vehicle on road beginning 876' from DER, 654' right of centerline, up to 27' AGL/69' MSL.

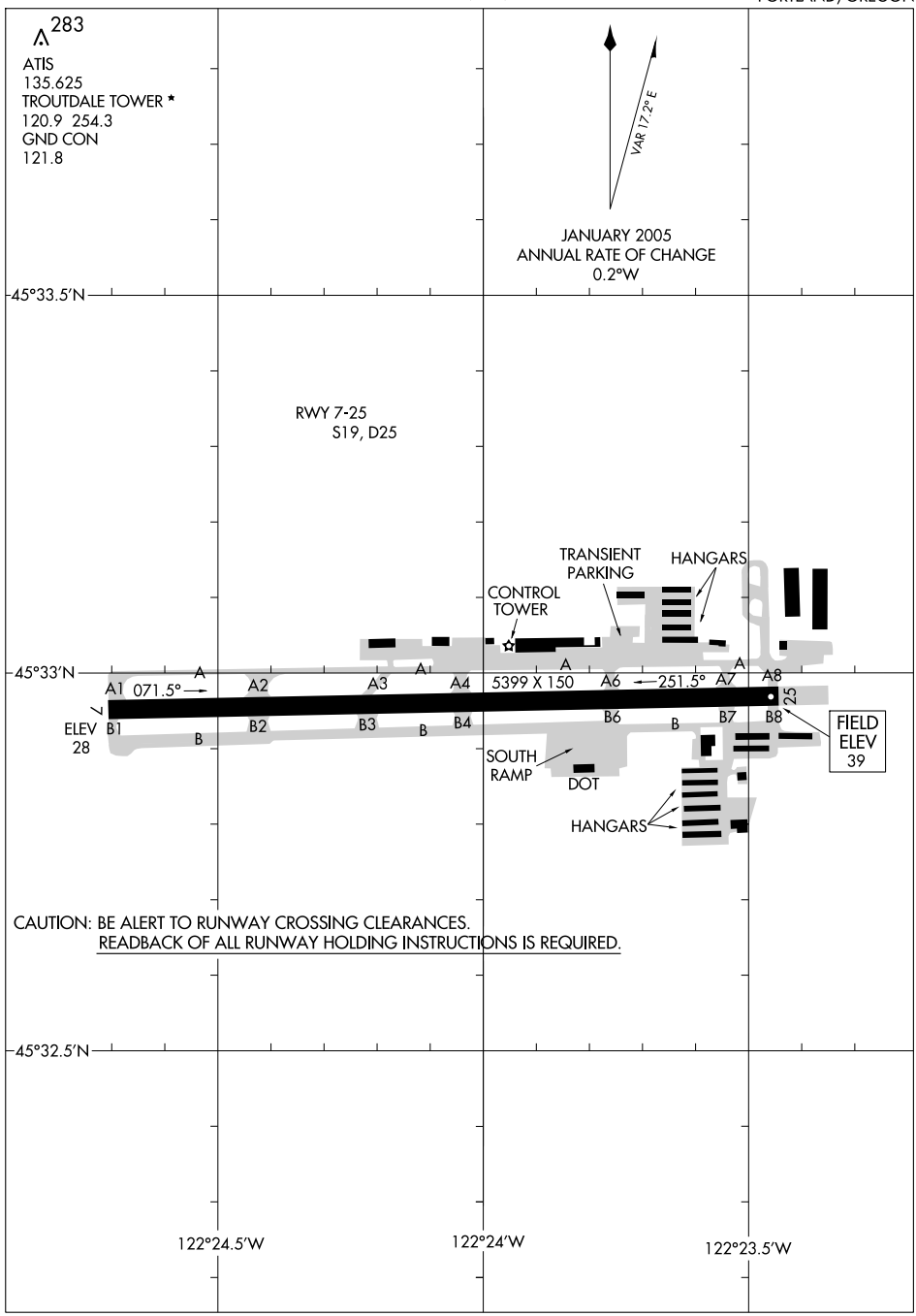
NW-1, 14 JAN 2010 to 11 FEB 2010

09127

AIRPORT DIAGRAM

AL-649 (FAA)

PORTLAND-TROUTDALE (TTD)
PORTLAND, OREGON



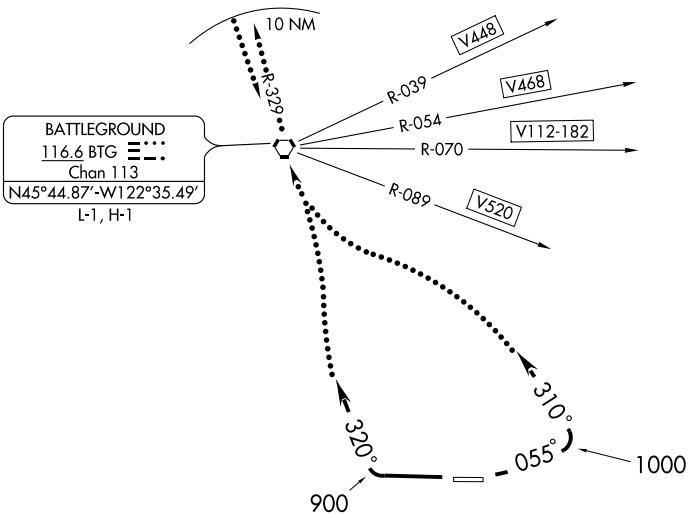
NW-1, 14 JAN 2010 to 11 FEB 2010

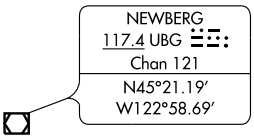
BLUE LAKE THREE DEPARTURE

SL-649 (FAA)

PORTLAND-TROUTDALE (TTD)
PORTLAND, OREGON

CTAF 120.9





NOTE: Rwy 7 requires a minimum climb gradient of 420′ per NM to 4000′.
Rwy 25 requires a minimum climb of 310′ per NM to 2000′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Climb via heading 055° to 1000′, then turn left to 310° or as assigned.

TAKE-OFF RUNWAY 25: Climb runway heading to 900′, then turn right to 320° or as assigned.

LOST COMMUNICATIONS: Proceed direct to BTG VORTAC. Continue climb on the BTG R-329 within 10 NM to cross BTG VORTAC at or above: NE-bound V448, 9400′; NE-bound V468, 4500′; E-bound V112, V182, V520, 4700′; for non airways BTG R-355 CW BTG R-120, 8800′; all others, 2500′.

ALTERNATE LOST COMMUNICATIONS PROCEDURE: When BTG VORTAC is out of service: if no contact with ATC leaving 3000′, continue climb to assigned altitude and proceed direct to UBG VOR/DME, thence via assigned route.

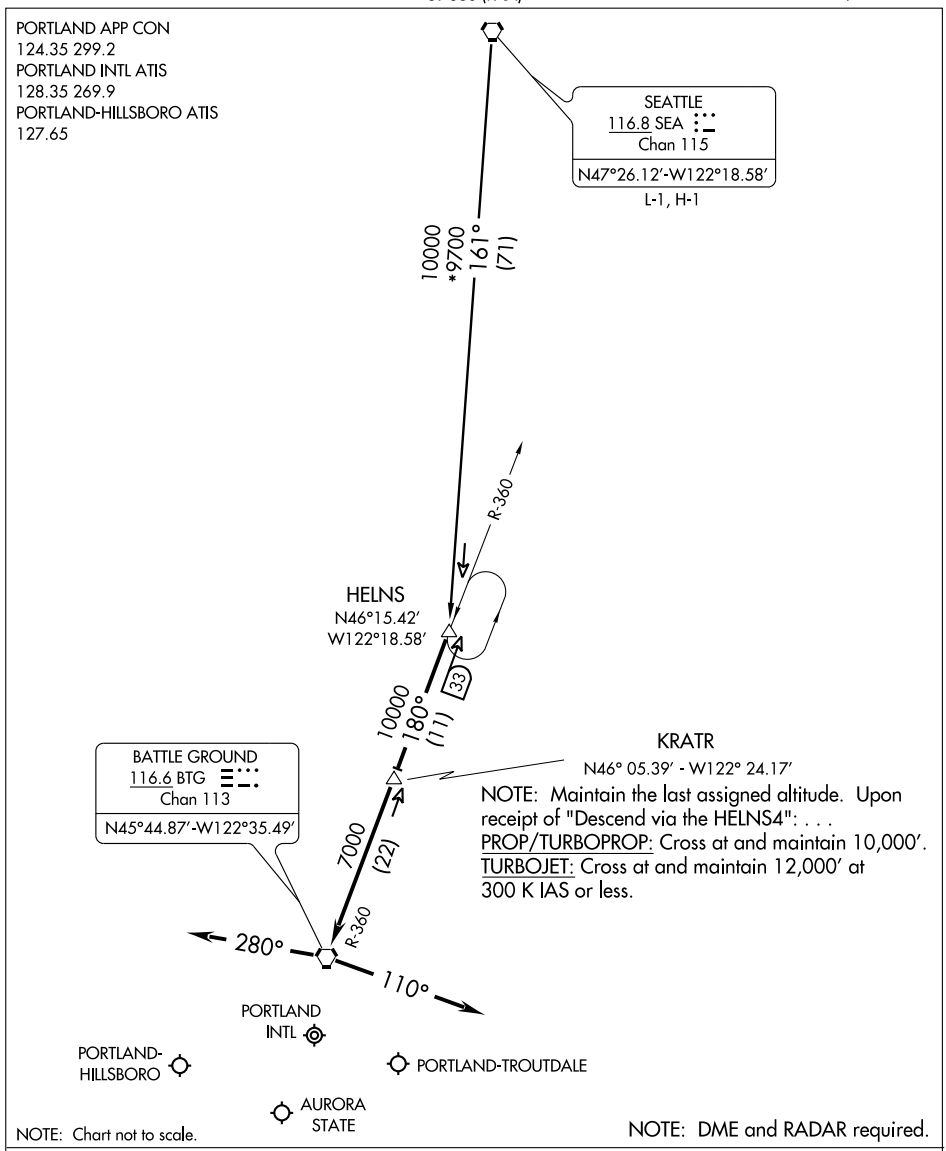
NW-1, 14 JAN 2010 to 11 FEB 2010

(HELNS.HELNS4) 03135

HELNS FOUR ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



SEATTLE TRANSITION (SEA.HELNS4): From over SEA VORTAC via SEA R-161 to HELNS DME FIX. Thence....

.... From over HELNS DME FIX via BTG R-360 to BTG VORTAC. Thence....

LANDING EAST: Depart BTG VORTAC heading 280° for vectors to final approach course.

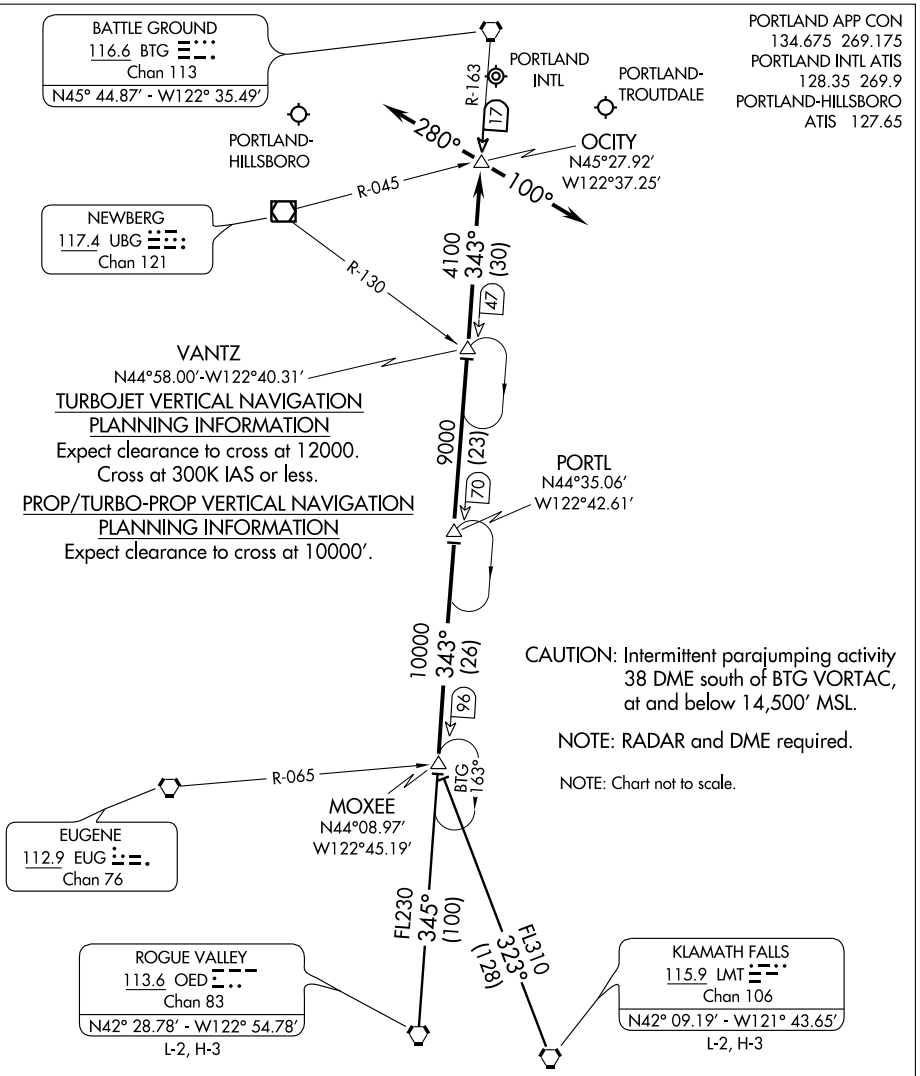
LANDING WEST: Depart BTG VORTAC heading 110° for vectors to final approach course.

NW-1, 14 JAN 2010 to 11 FEB 2010

MOXEE SIX ARRIVAL

ST-330 (FAA)

PORTLAND, OREGON



KLAMATH FALLS TRANSITION (LMT.MOXEE6): From over LMT VORTAC via LMT R-323 to MOXEE INT. Thence . . . .

ROGUE VALLEY TRANSITION (OED.MOXEE6): From over OED VORTAC via OED R-345 to MOXEE INT. Thence . . . .

. . . . From over MOXEE INT via BTG R-163 to OCITY INT. Thence via:

Landing East - Depart OCITY INT heading 280° for vectors to final approach course.

Landing West - Depart OCITY INT heading 100° for vectors to final approach course.

LOST COMMUNICATIONS: After OCITY INT, proceed direct BTG VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB LBH 332	APP CRS 057°	Rwy Idg N/A TDZE N/A Apt Elev 35

NDB or GPS-A
PORTLAND-TROUTDALE (TTD)

If local altimeter setting not received procedure not authorized.

MISSED APPROACH: Climbing left turn to 4000 via BTG R-125 to BTG VORTAC.

ATIS	PORTLAND APP CON	TROUTDALE TOWER ★	GND CON	UNICOM
135.625	124.35 299.2	120.9 (CTAF) L 254.3	121.8	122.95

RADAR REQUIRED

BATTLEGROUND 116.6 BTG Chan 113

LAKER 332 LBH

MSA LBH 25 NM
4100 (170°–080°)
6100 (080°–350°)
3100 (350°–170°)

R-125 R-162 R-147

Portland Int

CABBA INT

DUCKI INT

(MASGD)

057° 237°

4400 3438 4055

1474 ±

10 NM

Lost Communications: Proceed direct to Battleground VORTAC at 4000 or last assigned altitude, whichever is higher, and execute the VOR-A approach to Portland International Airport.

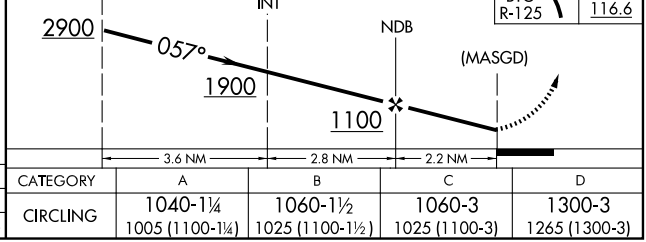
ELEV 35

TWR 106

5399 X 150

057° 2.2 NM from FAF

REIL Rwys 7 and 25
MIRL Rwy 7-25 L



FAF to MAP 2.2 NM					
Knots	60	90	120	150	180
Min:Sec	2:12	1:28	1:06	0:53	0:44

CATEGORY	A	B	C	D
CIRCLING	1040-1¼ 1005 (1100-1¼)	1060-1½ 1025 (1100-1½)	1060-3 1025 (1100-3)	1300-3 1265 (1300-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

DEPARTURE ROUTE DESCRIPTION

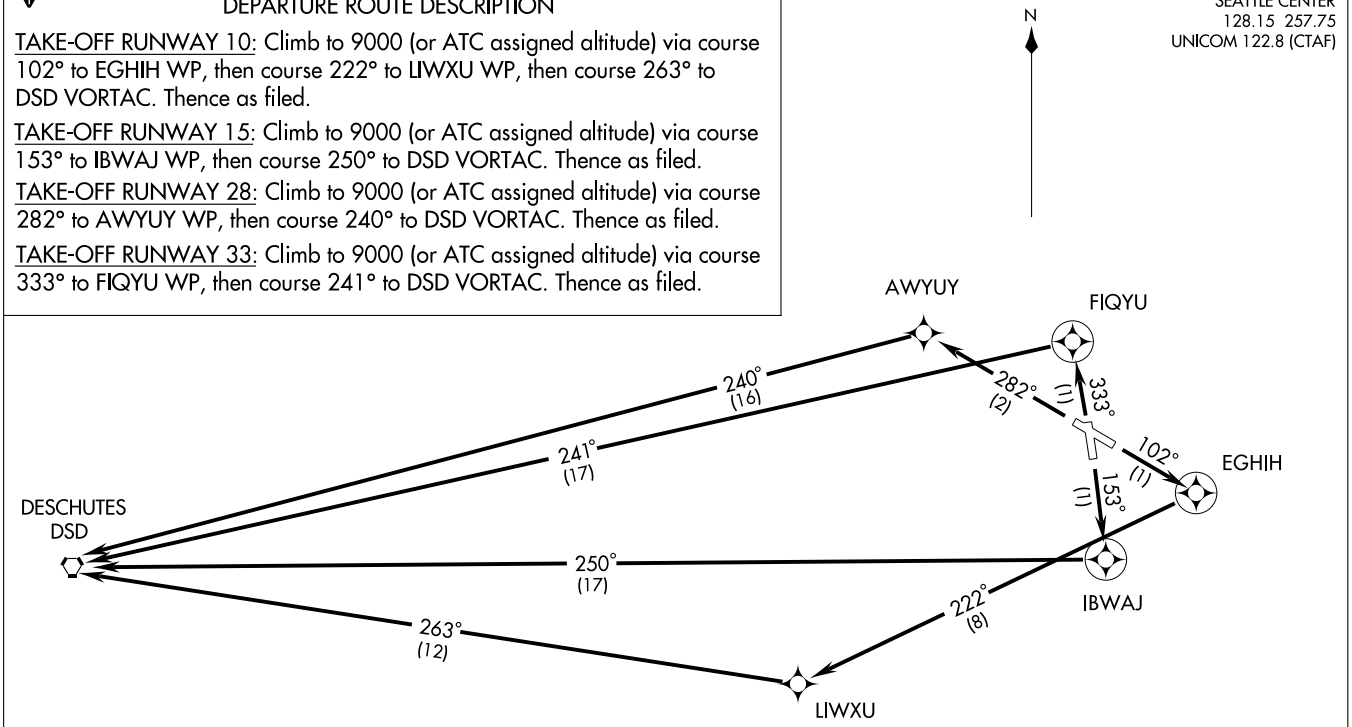
TAKE-OFF RUNWAY 10: Climb to 9000 (or ATC assigned altitude) via course 102° to EGHIH WP, then course 222° to LIWXU WP, then course 263° to DSD VORTAC. Thence as filed.

TAKE-OFF RUNWAY 15: Climb to 9000 (or ATC assigned altitude) via course 153° to IBWAJ WP, then course 250° to DSD VORTAC. Thence as filed.

TAKE-OFF RUNWAY 28: Climb to 9000 (or ATC assigned altitude) via course 282° to AWYUY WP, then course 240° to DSD VORTAC. Thence as filed.

TAKE-OFF RUNWAY 33: Climb to 9000 (or ATC assigned altitude) via course 333° to FIQYU WP, then course 241° to DSD VORTAC. Thence as filed.

SEATTLE CENTER
128.15 257.75
UNICOM 122.8 (CTAF)



NOTE: Standard with minimum climb gradient of 400' per NM to 9000', except V25 North requires minimum climb gradient of 400' per NM to 7000'.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

PRINEVILLE (S39)
PRINEVILLE, OREGON

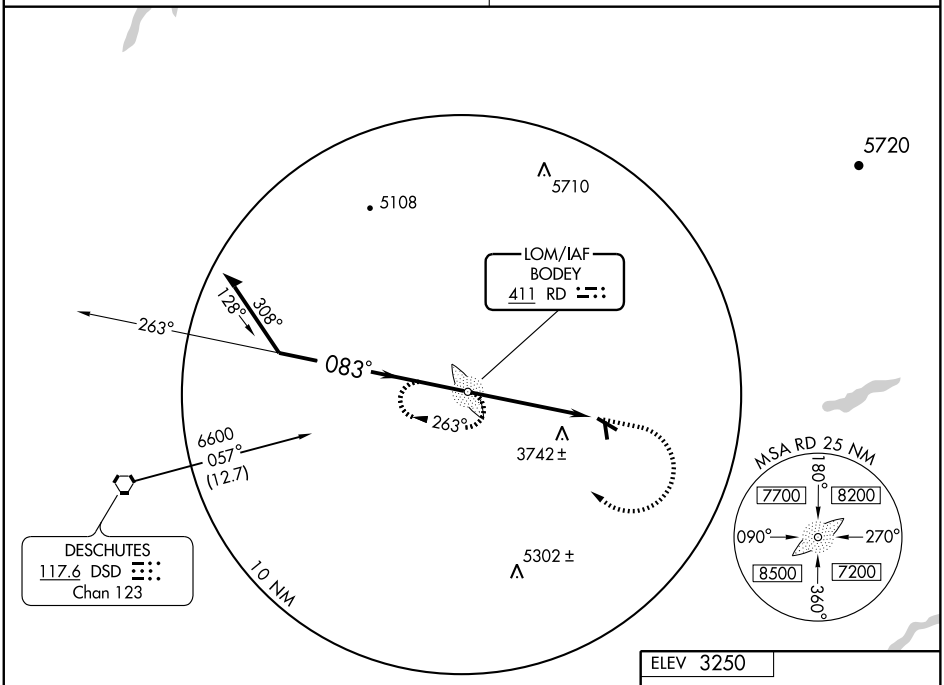
LOM RD	APP CRS		
411	083°	Rwy Idg	5000
		TDZE	3250
		Apt Elev	3250

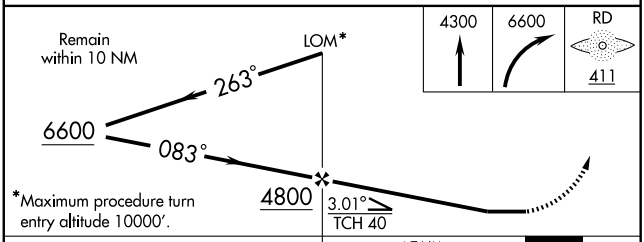
NDB RWY 10
PRINEVILLE (S39)

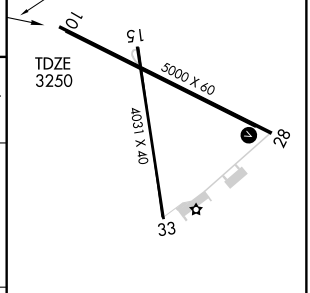
T
NA Use Roberts Field altimeter setting.

MISSED APPROACH: Climb to 4300 then climbing right turn to 6600 direct RD LOM and hold.

SEATTLE CENTER	UNICOM
128.15 257.75	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-10	4100-1 850 (900-1)	4100-1¼ 850 (900-1¼)	4100-2½ 850 (900-2½)	4100-2¾ 850 (900-2¾)
CIRCLING	4100-1 850 (900-1)	4100-1¼ 850 (900-1¼)	4100-2½ 850 (900-2½)	4100-2¾ 850 (900-2¾)

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5000
089°	TDZE	3250
	Apt Elev	3250

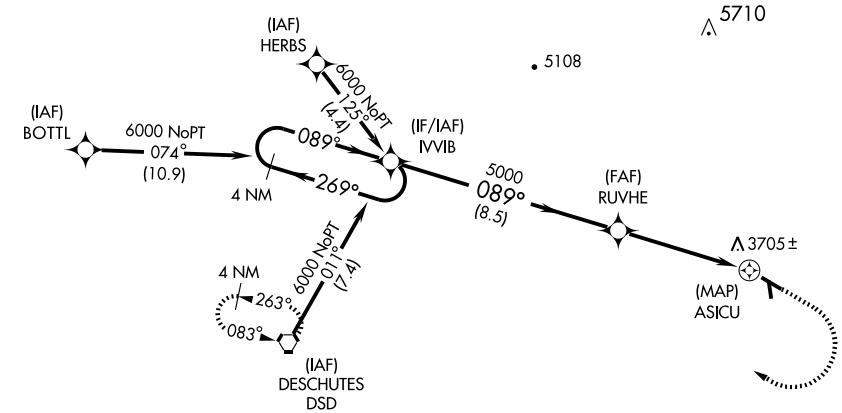
RNAV (GPS) RWY 10

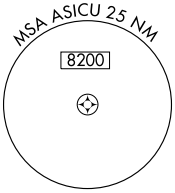
PRINEVILLE (S39)

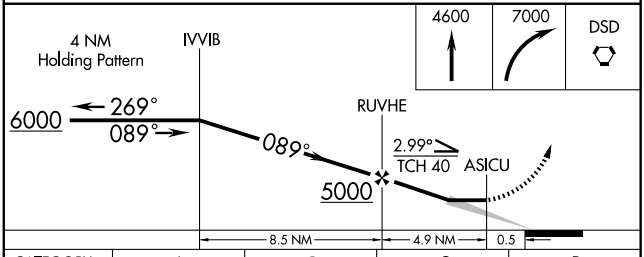
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Use Roberts Field altimeter setting.

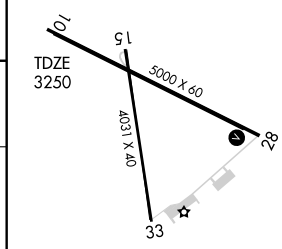
MISSED APPROACH: Climb to 4600 then climbing right turn to 7000 direct DSD VORTAC and hold.

SEATTLE CENTER	UNICOM
128.15 257.75	122.8 (CTAF) L









CATEGORY	A	B	C	D
LNAV MDA	4020-1 770 (800-1)	4020-1¼ 770 (800-1¼)	4020-2¼ 770 (800-2¼)	4020-2½ 770 (800-2½)
CIRCLING	4060-1 810 (900-1)	4100-1¼ 850 (900-1¼)	4100-2½ 850 (900-2½)	4100-2¾ 850 (900-2¾)

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

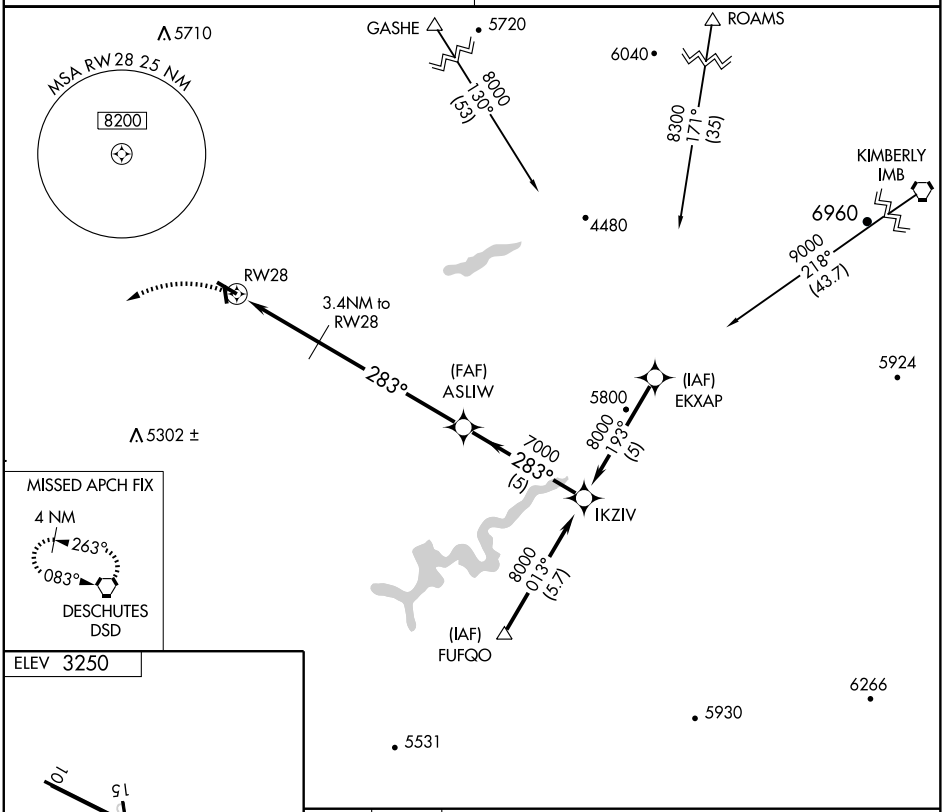
APP CRS	Rwy Idg	5000
283°	TDZE	3246
	Apt Elev	3250

RNAV (GPS) RWY 28
PRINEVILLE (S39)

T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA. Use Roberts Field altimeter setting.

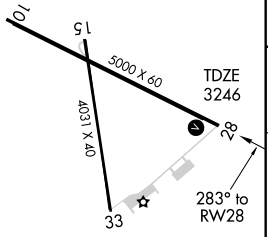
MISSED APPROACH: Climbing left turn to 7000 direct DSD VORTAC and hold.

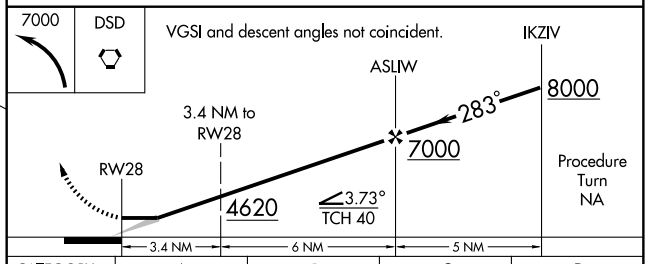
SEATTLE CENTER	UNICOM
128.15 257.75	122.8 (CTAF) L



MISSED APCH FIX
4 NM
263°
083°
DESCHUTES
DSD

ELEV 3250

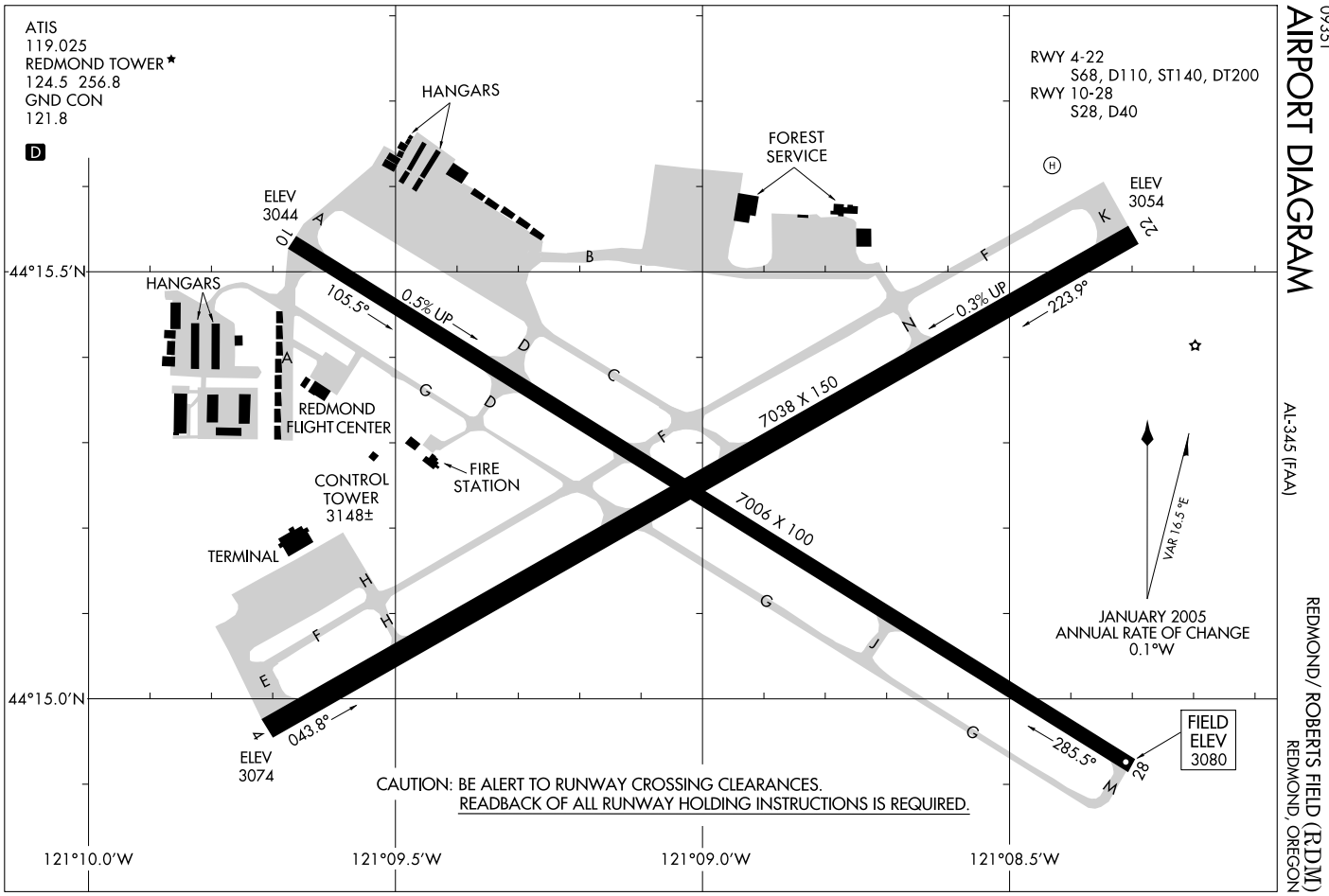




CATEGORY	A	B	C	D
LNAV MDA	3840-1 594 (600-1)		3840-1½ 594 (600-1½)	NA
CIRCLING	4060-1 810 (900-1)	4100-1¼ 850 (900-1¼)	4100-2½ 850 (900-2½)	4100-2¾ 850 (900-2¾)

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010



09331

AIRPORT DIAGRAM

AL-345 (FAA)

REDMOND/ROBERTS FIELD (RDM)

REDMOND, OREGON

LOC I-RDM	APP CRS	Rwy Idg	7038
109.1	222°	TDZE	3065
		Apt Elev	3080

ILS or LOC RWY 22

REDMOND/ROBERTS FIELD (RDM)

For inoperative MALSR, increase S-ILS 22 Cat. E visibility to ¾.
For inoperative MALSR, increase S-LOC 22 Cat. D and E visibility to 1. Autopilot coupled approach NA below 4370.

MALSR

MISSED APPROACH: Climb to 3500 then climbing right turn to 7000 via heading 315° and DSD VORTAC R-348 to CUPRI/DSD 22 DME and hold.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95

DME REQUIRED

MISSED APCH FIX
(IAF) CUPRI DSD 22
R-348
168°
348°
CUPRI DSD 22

MSA RD 25 NM
180°
7700 8200
090° 270°
8500 7300
360°

7800 DSD 22 Arc
R-348
6080
5710
5108
5720
6040
LR-045
042°
LOM BODEY 411 RD
HUTKI DSD 17.3
LR-056
5100
222° (4.7)
6300 222° (4.7)
(IF) YUBUB DSD 22
3081±
3126±
4101
DESCHUTES 117.6 DSD Chan 123
LOCALIZER 109.1 I-RDM
5335
5800
6178
5560
4570
15 NM
5930
R-171
7800 DSD 22 Arc
5850
5697
(IAF) FESOD DSD 22
5148

ELEV 3080 D

222° 5.9 NM from FAF

TDZE 3065

0.5% UP
0.3% UP
7006 X 100
7038 X 150
10
22
4
28

3500	7000	DSD	CUPRI
	315°	R-348 117.6	△

VGSI and ILS glidepath not coincident.

Procedure Turn NA

HUTKI DSD 17.3
YUBUB DSD 22
LOM
5017
DSD 7.1
222°
7800
6300
5100
GS 3.00°
TCH 47
5.9 NM 4.7 NM 4.7 NM

CATEGORY	A	B	C	D	E
S-ILS 22	3265-½ 200 (200-½)				
S-LOC 22	3340-½ 275 (300-½)			3340-¾ 275 (300-¾)	
CIRCLING	3520-1 440 (500-1)	3540-1 460 (500-1)	3540-1½ 460 (500-1½)	3780-2¼ 700 (700-2¼)	3780-2½ 700 (700-2½)

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

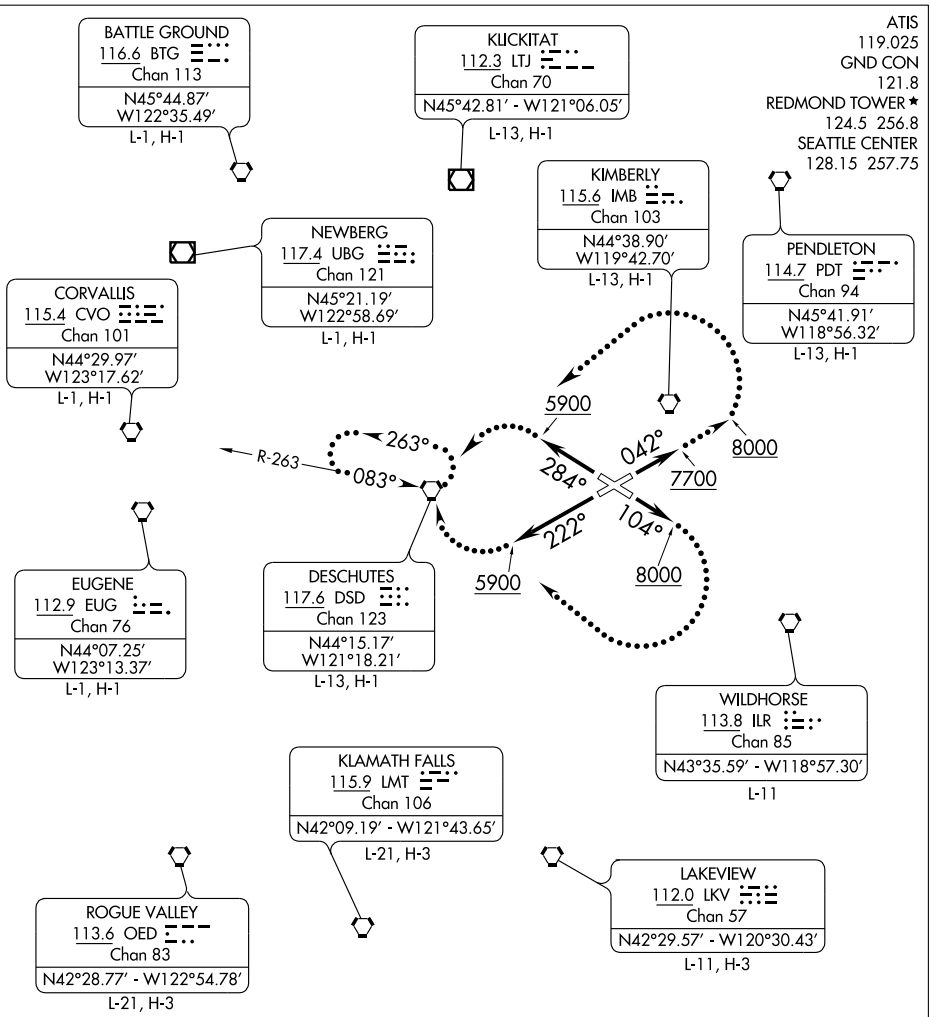
FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NW-1, 14 JAN 2010 to 11 FEB 2010

REDMOND ONE DEPARTURE

REDMOND/ROBERTS FIELD (RDM)
REDMOND, OREGON



TAKE-OFF OBSTACLE

Rwy 28: Numerous trees beginning 1′ from DER, 356′ right of centerline, 12′ AGL/3079′ MSL. Tree 364′ from DER, 448′ left of centerline, 15′ AGL/3054′ MSL.

TAKE-OFF MINIMUMS

Rwy 4: Standard with minimum obstacle climb of 371′ per NM to 13000, ATC climb of 465′ per NM to 7700.

Rwy 10: Standard with minimum climb of 406′ per NM to 13000.

Rwy 22: Standard with minimum obstacle climb of 356′ per NM to 13000, ATC climb of 406′ per NM to 5900.

Rwy 28: Standard with minimum climb of 358′ per NM to 13000.

NOTE: RADAR required.

(NARRATIVE ON THE FOLLOWING PAGE)

NOTE: Chart not to scale.

REDMOND ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climb heading 042° or ATC assigned heading to 7700 for radar vectors to assigned route/fix, Thence. . . .
TAKE-OFF RUNWAY 10: Climb heading 104° or ATC assigned heading to 8000 for radar vectors to assigned route/fix, Thence. . . .
TAKE-OFF RUNWAY 22: Climb heading 222° or ATC assigned heading to 5900 for radar vectors to assigned route/fix, Thence. . . .
TAKE-OFF RUNWAY 28: Climb heading 284° or ATC assigned heading to 5900 for radar vectors to assigned route/fix, Thence. . . .

. . . . Maintain 14000 or assigned altitude, expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Center after reaching 6000, continue climb to assigned altitude and:
TAKE-OFF RUNWAY 4: Continue climb to 8000, then climbing left turn direct DSD VORTAC. . . .
TAKE-OFF RUNWAY 10: Climbing right turn direct DSD VORTAC. . . .
TAKE-OFF RUNWAY 22: Climbing right turn direct DSD VORTAC. . . .
TAKE-OFF RUNWAY 28: Climbing left turn direct DSD VORTAC. . . .

. . . . Climb-in-hold at DSD VORTAC (hold W, LT, 083° inbound) to cross DSD VORTAC at or above the MEA before proceeding on course.

WAAS CH 70514 W04A	APP CRS 042°	Rwy Idg 7038 TDZE 3075 Apt Elev 3080

RNAV (GPS) RWY 4

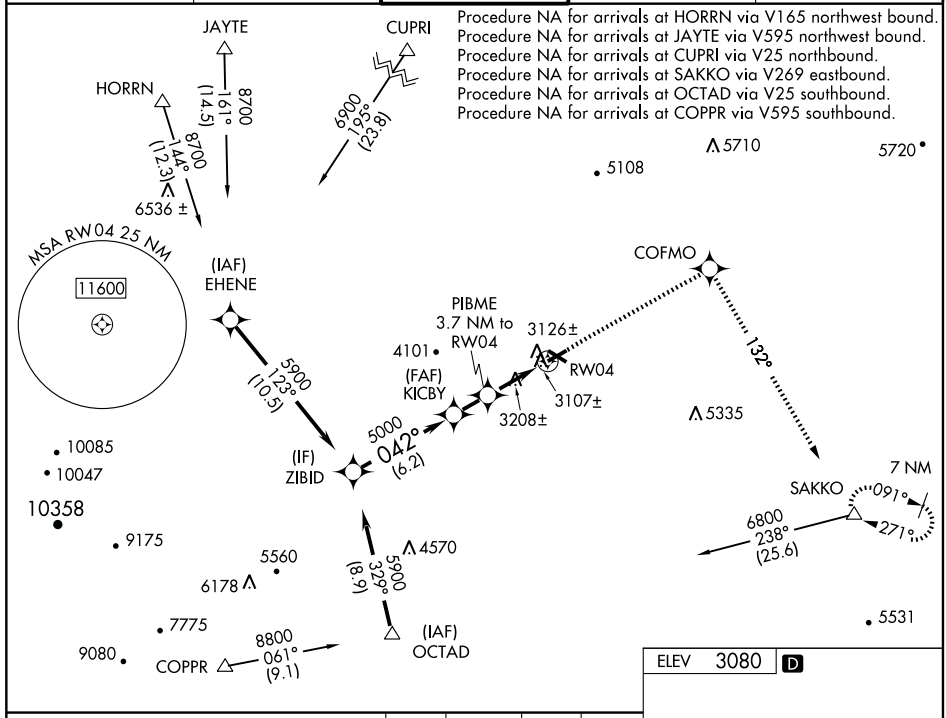
REDMOND/ROBERTS FIELD (RDM)

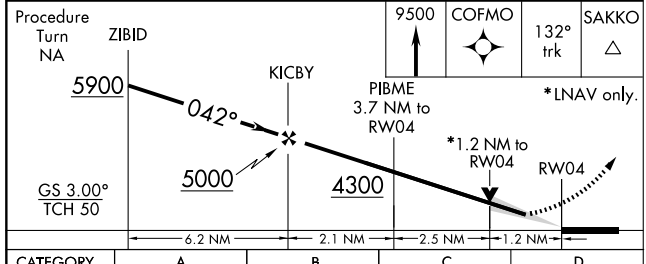
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 43°C (109°F). DME/DME RNP -0.3 NA. When local altimeter setting not received procedure NA.

MISSED APPROACH: Climb to 9500 direct COFMO and via track 132° to SAKKO and hold, continue climb-in-hold to 9500.

ATIS	SEATTLE CENTER	REDMOND TOWER*	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95

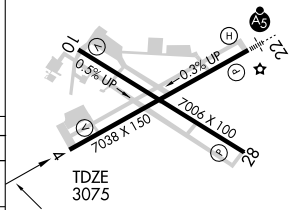
Procedure NA for arrivals at HORRN via V165 northwest bound.
Procedure NA for arrivals at JAYTE via V595 northwest bound.
Procedure NA for arrivals at CUPRI via V25 northbound.
Procedure NA for arrivals at SAKKO via V269 eastbound.
Procedure NA for arrivals at OCTAD via V25 southbound.
Procedure NA for arrivals at COPPR via V595 southbound.





CATEGORY	A	B	C	D
LPV DA	3325-¾ 250 (300-¾)			
LNAV/VNAV DA	3367-1 292 (300-1)			
LNAV MDA	3520-1 445 (500-1)		3520-1¼ 445 (500-1¼)	3520-1½ 445 (500-1½)
CIRCLING	3520-1 440 (500-1)	3540-1 460 (500-1)	3540-1½ 460 (500-1½)	3640-2 560 (600-1)

ELEV 3080 D



REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 53514 W10A	APP CRS 104°	Rwy Idg 7006 TDZE 3067 Apt Elev 3080

RNAV (GPS) RWY 10

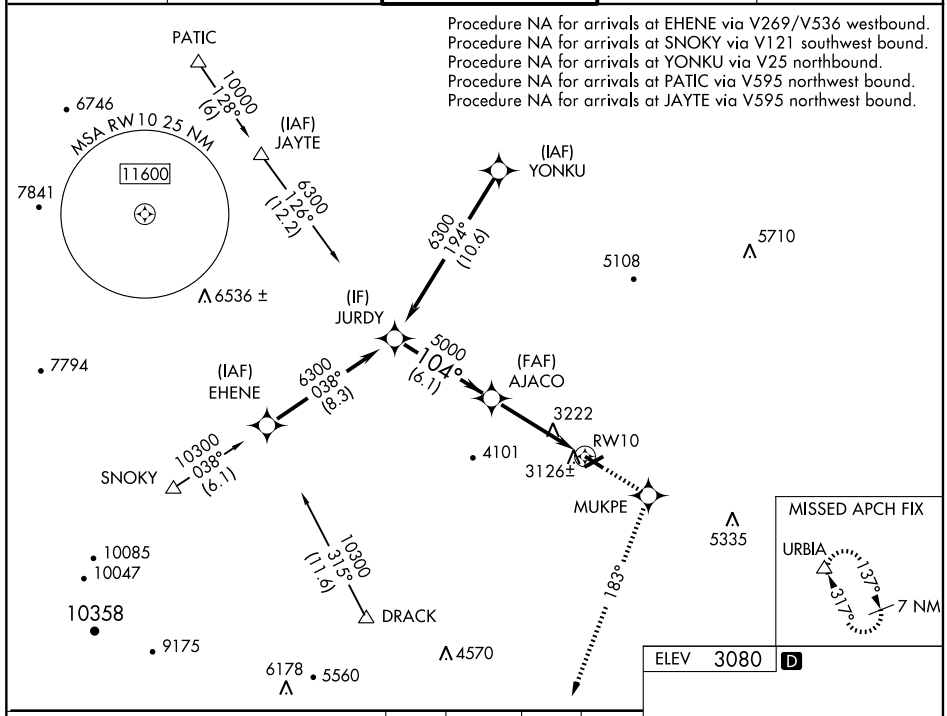
REDMOND/ROBERTS FIELD (RDM)

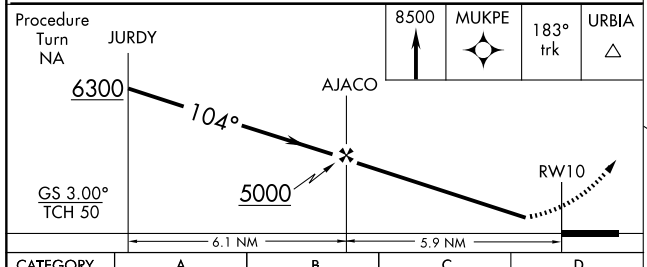
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 43°C (109°F). When local altimeter setting not received, procedure NA.

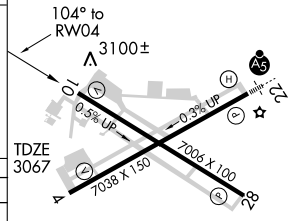
MISSED APPROACH: Climb to 8500 direct MUKPE and via track 183° to URBIA and hold, continue climb-in-hold to 8500.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95

Procedure NA for arrivals at EHENE via V269/V536 westbound.
Procedure NA for arrivals at SNOKY via V121 southwest bound.
Procedure NA for arrivals at YONKU via V25 northbound.
Procedure NA for arrivals at PATIC via V595 northwest bound.
Procedure NA for arrivals at JAYTE via V595 northwest bound.







CATEGORY	A	B	C	D
LPV DA	3317-1 250 (300-1)			
LNAV/VNAV DA	3370-1 303 (300-1)			
LNAV MDA	3480-1 413 (400-1)		3480-1¼ 413 (400-1¼)	
CIRCLING	3480-1 400 (400-1)	3540-1 460 (500-1)	3540-1½ 460 (500-1½)	3640-2 560 (600-1)

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	7038
CH 82514	222°	TDZE	3065
W22A		Apt Elev	3080

RNAV (GPS) RWY 22

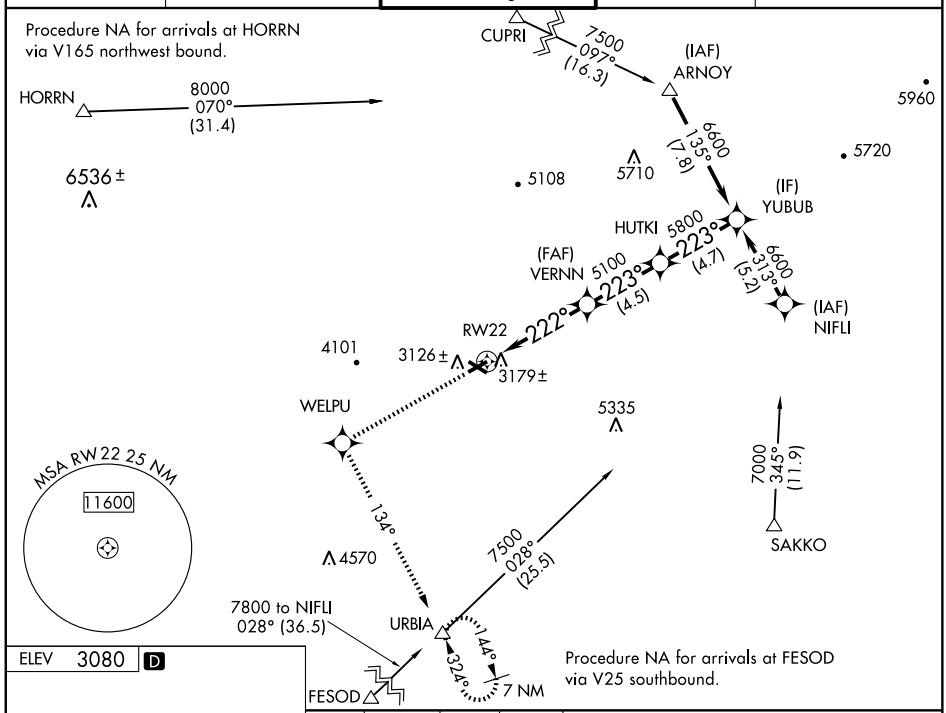
REDMOND/ROBERTS FIELD (RDM)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 43°C (109°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, procedure NA. For inoperative MALSR, increase LNAV Cat. D visibility to 1¼ mile.

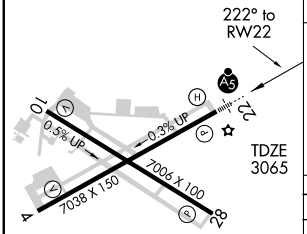
MALSR A5

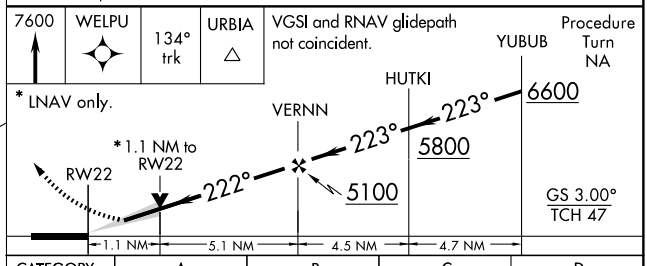
MISSED APPROACH: Climb to 7600 direct WELPU and via track 134° to URBIA and hold, continue climb-in-hold to 7600.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95



ELEV 3080 D





CATEGORY	A	B	C	D
LPV DA	3265-½ 200 (200-½)			
LNAV/VNAV DA	3449-1 384 (400-1)			
LNAV MDA	3440-½ 375 (400-½)			3440-1 375 (400-1)
CIRCLING	3480-1 400 (400-1)	3540-1 460 (500-1)	3540-1½ 460 (500-1½)	3640-2 560 (600-1)

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	7006
284°	TDZE	3080
	Apt Elev	3080

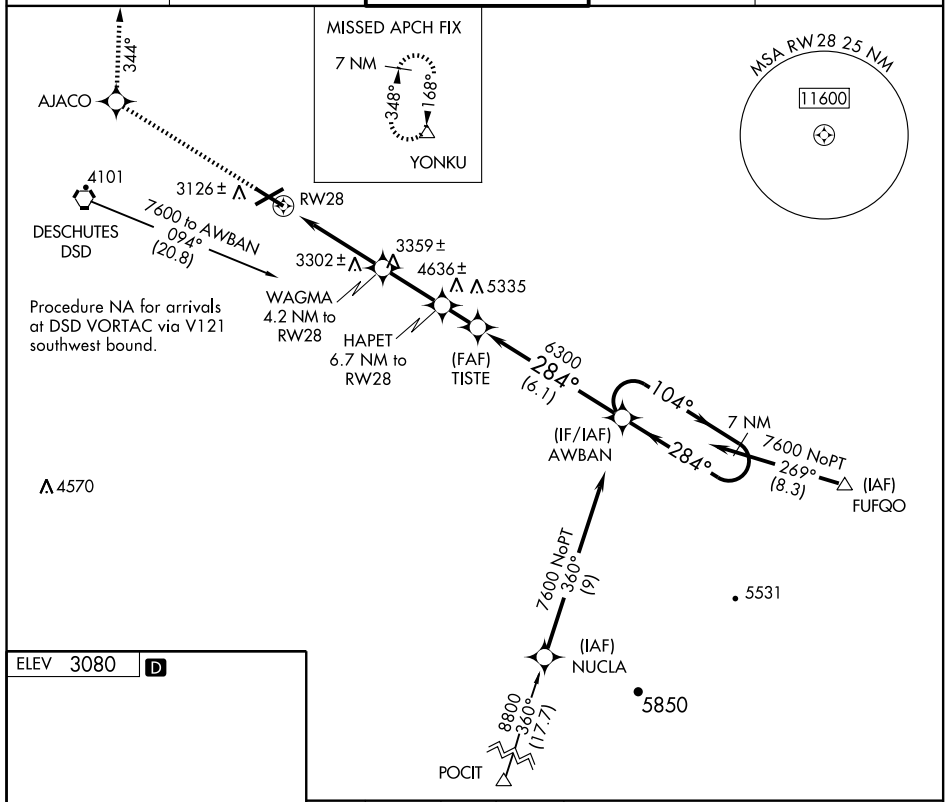
RNAV (GPS) Y RWY 28

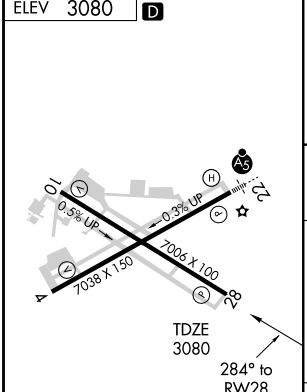
REDMOND/ ROBERTS FIELD (RDM)

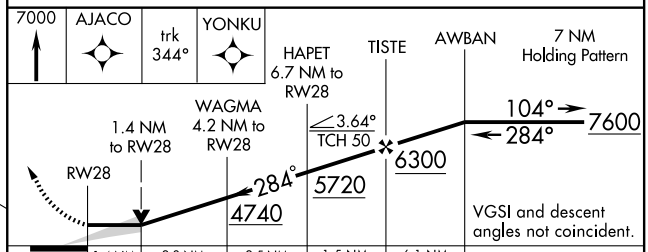
DME/DME RNP -0.3 NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 7000 direct AJACO and via track 344° to YONKU and hold, continue climb-in-hold to 7000.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95







CATEGORY	A	B	C	D
LNAV MDA	3560-1	480 (500-1)	3560-1¼ 480 (500-1¼)	NA
CIRCLING	3560-1	480 (500-1)	3560-1½ 480 (500-1½)	NA

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	7006
CH 90214	284°	TDZE	3080
W28A		Apt Elev	3080

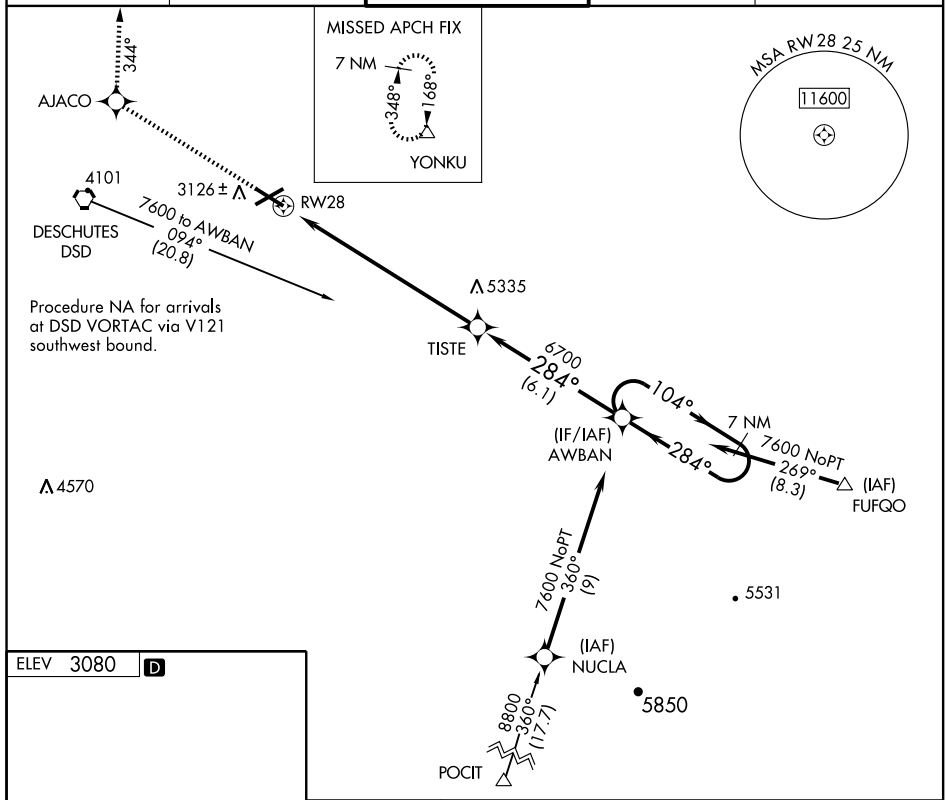
RNAV (GPS) Z RWY 28

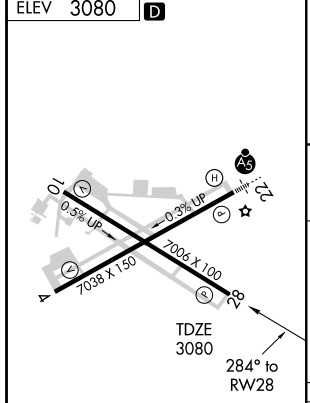
REDMOND/ROBERTS FIELD (RDM)

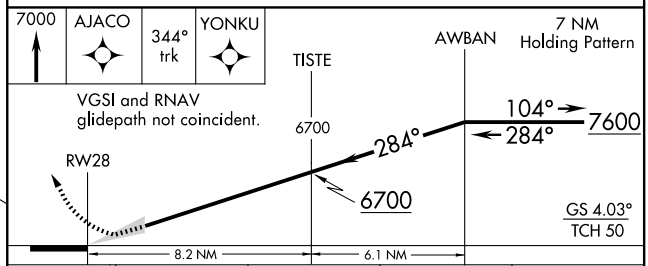
DME/DME RNP -0.3 NA.
When local altimeter setting not received, procedure NA.
Circling requires descent on glidepath to MDA.

MISSED APPROACH: Climb to 7000 direct AJACO and via track 344° to YONKU and hold, continue climb-in-hold to 7000.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95







CATEGORY	A	B	C	D
LPV DA	3366-¾ 286 (300-¾)	3366-1 286 (300-1)	NA	
CIRCLING	3480-1 400 (400-1)	3540-1 460 (500-1)	NA	

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

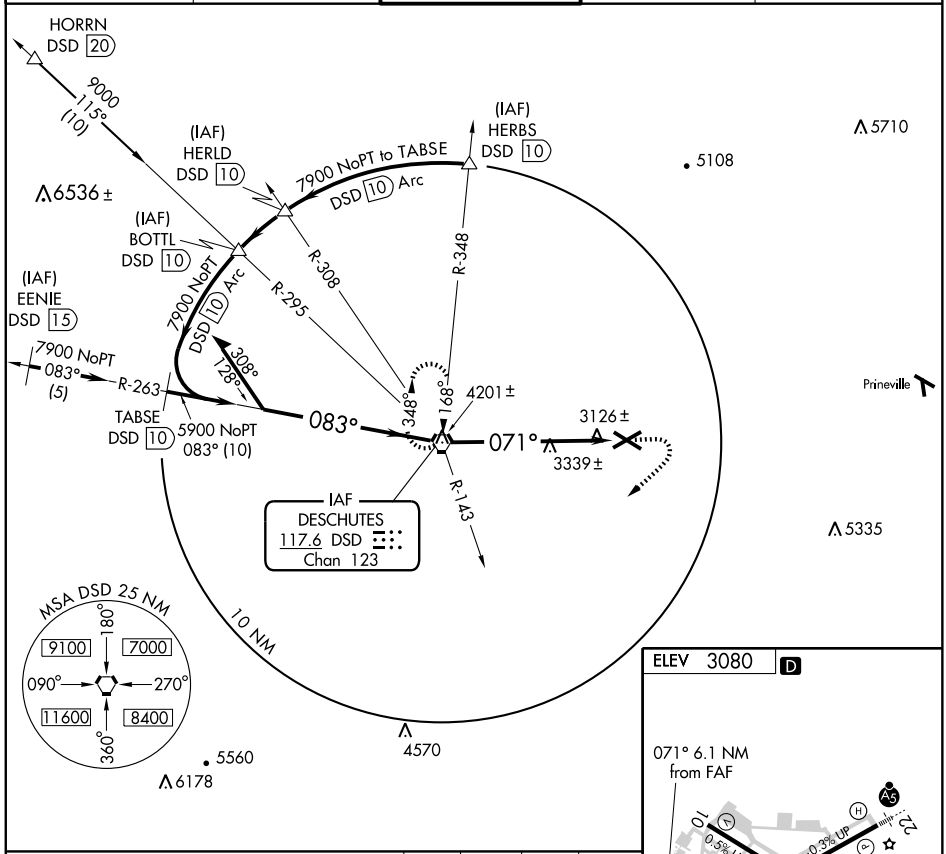
VORTAC DSD 117.6 Chan 123	APP CRS 071°	Rwy Idg N/A TDZE N/A Apt Elev 3080

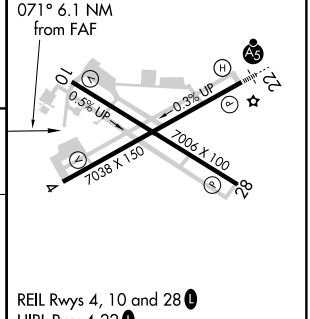
VOR-A

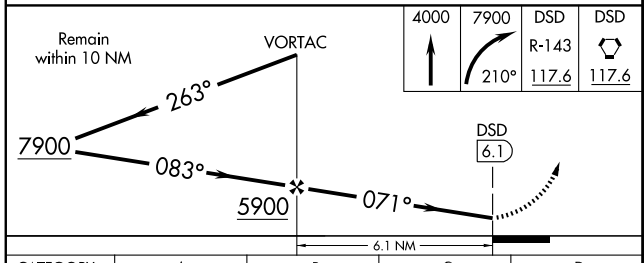
REDMOND/ ROBERTS FIELD (RDM)

MISSED APPROACH: Climb to 4000 then climbing right turn to 7900 via heading 210° and DSD R-143 to DSD VORTAC and hold.

ATIS	SEATTLE CENTER	REDMOND TOWER*	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95







4000	7900	DSD	DSD
	210°	R-143 117.6	117.6

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

CATEGORY	A	B	C	D
CIRCLING	3600-1 520 (600-1)		3600-1½ 520 (600-1½)	3640-2 560 (600-2)

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC DSD 117.6 Chan 123	APP CRS 249°	Rwy Idg 7038 TDZE 3065 Apt Elev 3080

VOR/DME RWY 22

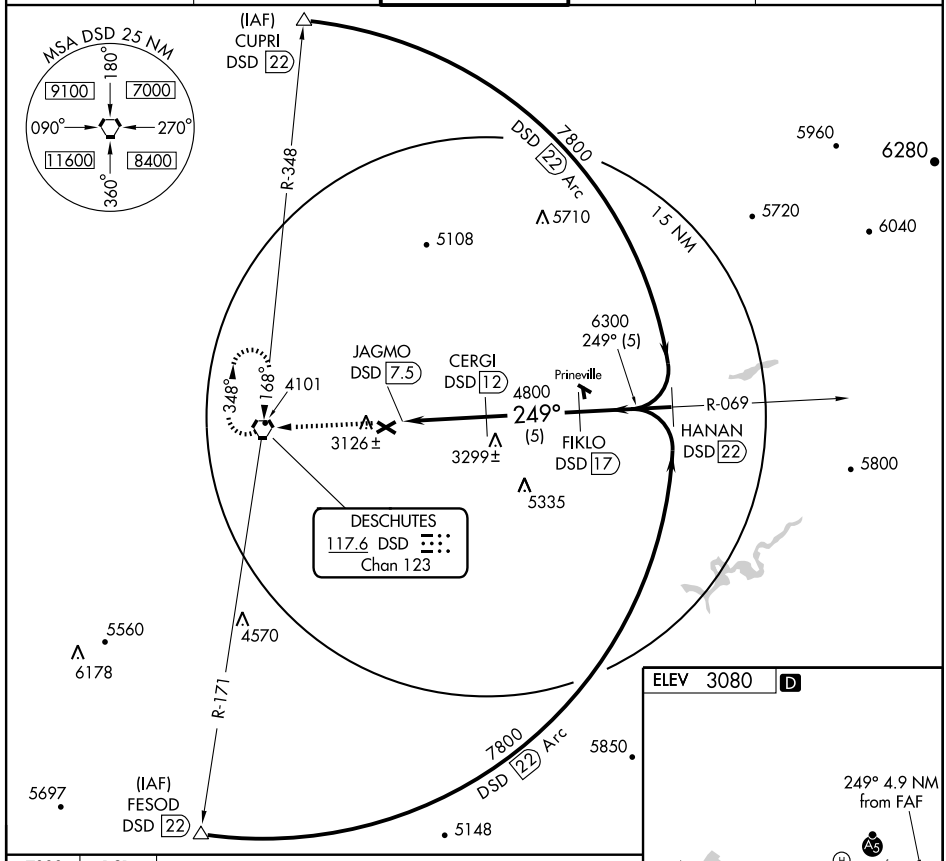
REDMOND/ROBERTS FIELD (RDM)

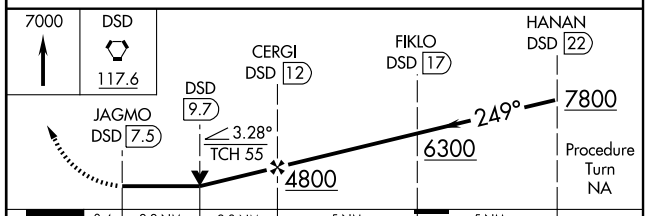
T A Inoperative table does not apply.

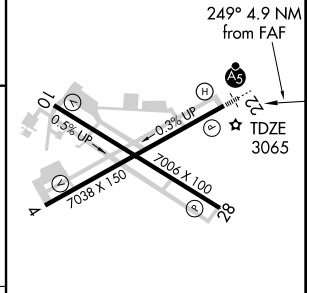
MALSR

MISSED APPROACH: Climb to 7000 direct DSD VORTAC and hold.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	128.15 257.75	124.5 (CTAF) L 256.8	121.8	122.95







CATEGORY	A	B	C	D	E
S-22	4000-1¼	935 (1000-1¼)	4000-2¾	935 (1000-2¾)	4000-3	935 (1000-3)
CIRCLING	4000-1¼	920 (1000-1¼)	4000-2¾	920 (1000-2¾)	4000-3	920 (1000-3)

REIL Rwys 4, 10 and 28 L
HIRL Rwy 4-22 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

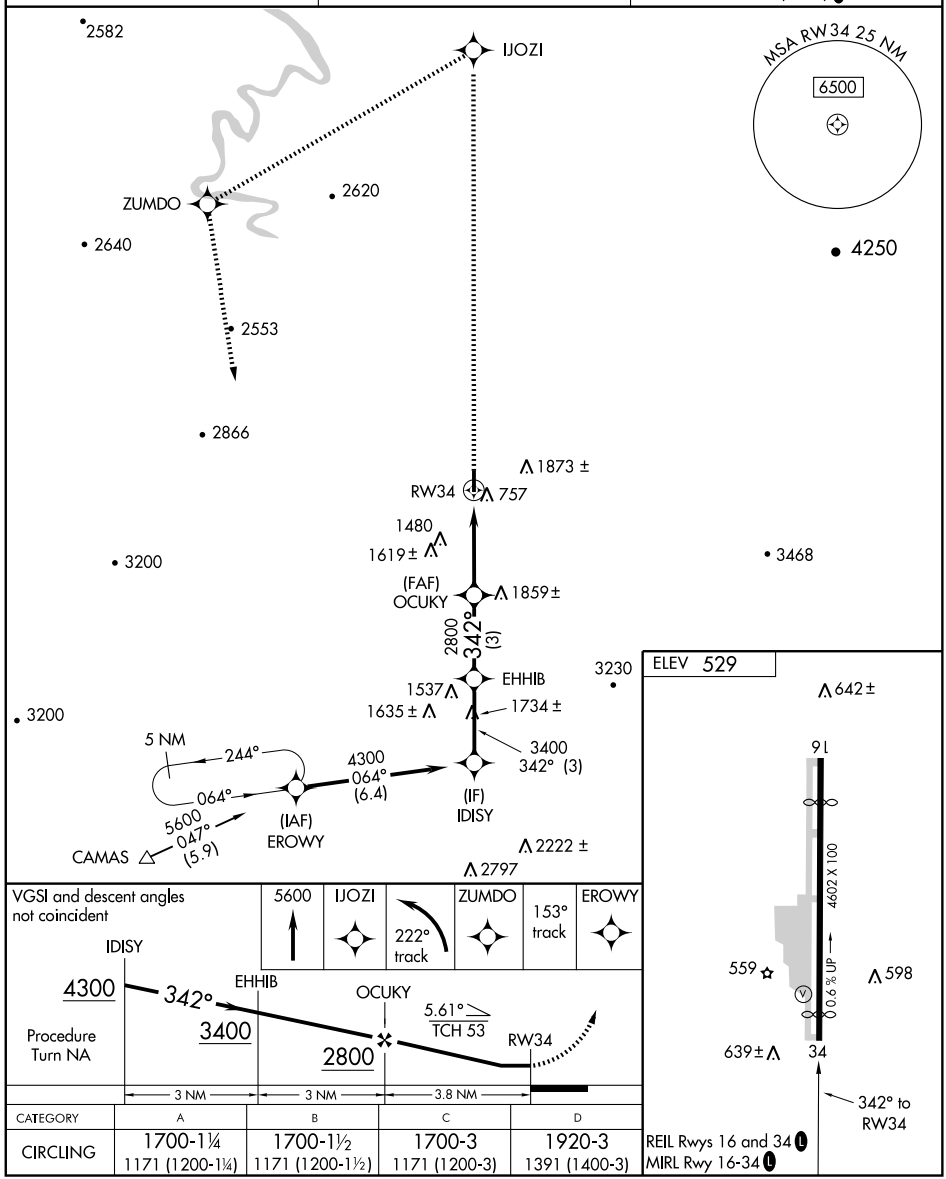
APP CRS	Rwy Idg	N/A
342°	TDZE	N/A
	Apt Elev	529

RNAV (GPS)-B
ROSEBURG RGNL (RBG)

T A Circling NA east of Rwy 16-34.
If local altimeter setting not received, use North Bend altimeter setting and increase all MDAs 520 feet.
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 5600 direct IJOZI and left turn via 222° track to ZUMDO and via 153° track to EROWY and hold.

ASOS	SEATTLE CENTER	UNICOM
135.475	121.4 239.0	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	1700-1¼ (1200-1¼)	1700-1½ (1200-1½)	1700-3 (1200-3)	1920-3 (1400-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME RBG	APP CRS	Rwy Idg	N/A
108.2	337°	TDZE	N/A
Chan 19		Apt Elev	525

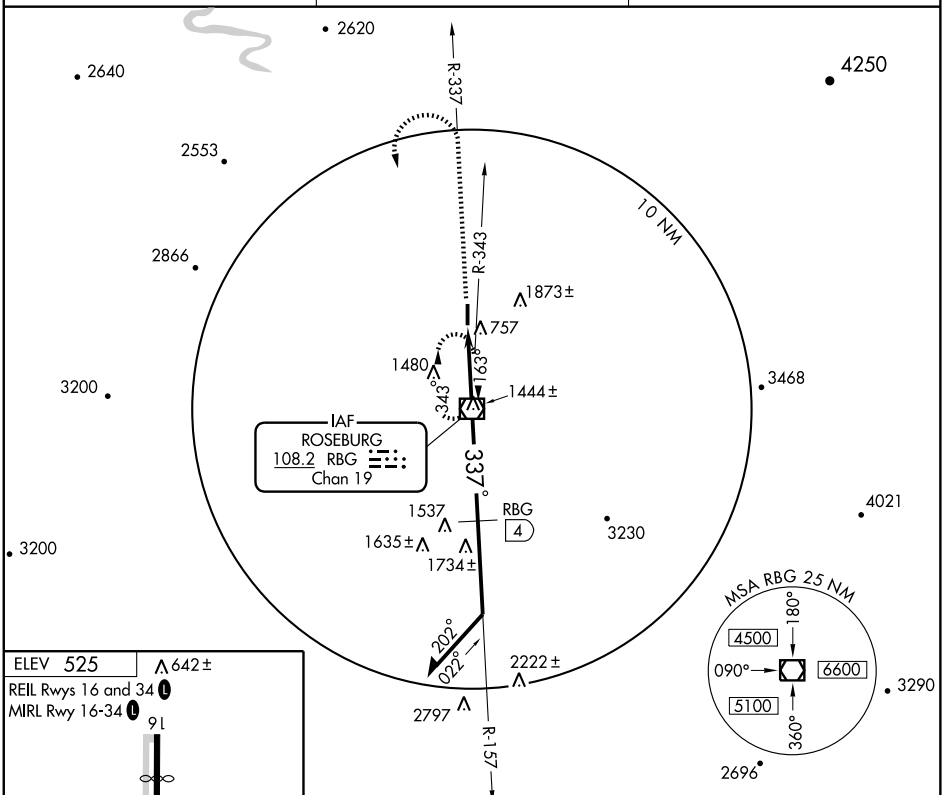
VOR-A

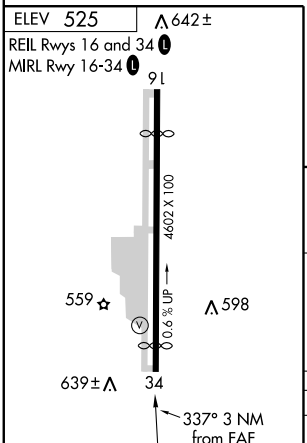
ROSEBURG RGNL (RBG)

NA — Circling not authorized east of Rwy 16-34.

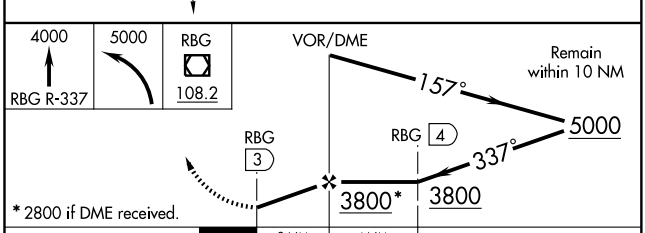
MISSED APPROACH: Climb to 4000 via RBG R-337 within 15 NM; then climbing left turn to 5000 direct RBG VOR/DME and hold.

ASOS	SEATTLE CENTER	UNICOM
135.475	121.4 239.0	122.8 (CTAF)





FAF to MAP 3 NM					
Knots	60	90	120	150	180
Min:Sec	3:00	2:00	1:30	1:12	1:00



CATEGORY	A	B	C	D
CIRCLING	2600-1¼ 2075 (2100-1¼)	2600-1½ 2075 (2100-1½)	2600-3 2075 (2100-3)	
	DME MINIMUMS			
CIRCLING	1740-1¼ 1215 (1300-1¼)	1740-1½ 1215 (1300-1½)	1740-3 1215 (1300-3)	1920-3 1395 (1400-3)

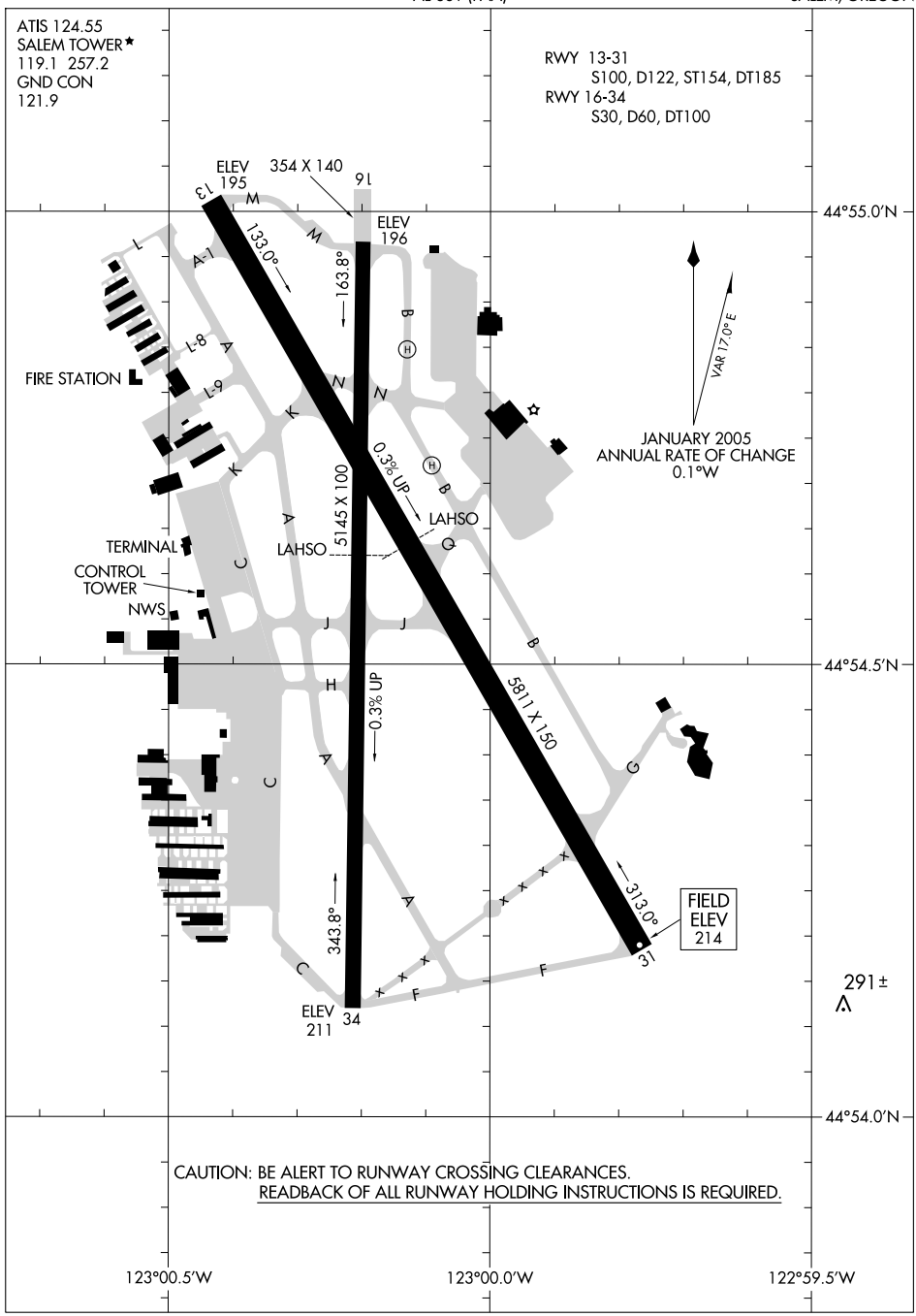
NW-1, 14 JAN 2010 to 11 FEB 2010

06215

AIRPORT DIAGRAM

AL-361 (FAA)

SALEM/MCNARY FIELD (SLE)
SALEM, OREGON



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SLE	APP CRS	Rwy Idg	5811
110.3	313°	TDZE	214
Chan 40		Apt Elev	214

ILS or LOC RWY 31

SALEM / MCNARY FIELD (SLE)

T A *RVR 1800 authorized with the use of FD or AP or HUD to DA. When local altimeter setting not received, use Mc Minnville altimeter setting and increase DA 49 feet, and all MDA 60 feet; increase circling Cat D visibility to 2 ¾ miles. VDP NA when using Mc Minnville altimeter setting.

MALSR

MISSED APPROACH: Climb to 4000 via I-SLE NW course to ARTTY FM/INT/I-SLE 5.6 DME and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE CENTER	SALEM TOWER ★	GND CON	UNICOM
124.55	125.8 291.7	119.1 (CTAF) L 257.2	121.9	122.95

ALTERNATE MISSED APCH FIX

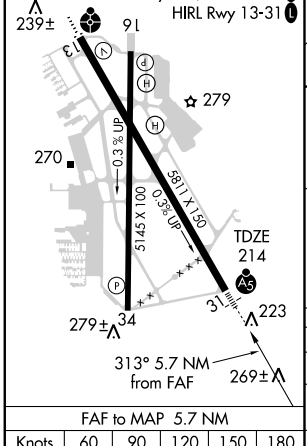
TURNO SL 266

Procedure NA for arrivals at JAIME via V536 eastbound.
Procedure NA for arrivals at GLORR via V448 southbound.

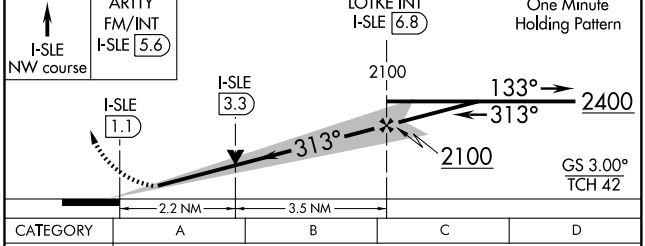
MSA SL 25 NM
200°
3100
110°
6300
320°
4800

3300 to LOTKE 133° (12.4)
NEWBERG 117.4 UBG Chan 121
2064
1289
ARTTY FM/INT I-SLE 5.6
3800
155° (32)
714
354
392
696
556±
673±
1449
755±
(IAF) LOTKE INT I-SLE 6.8
LOCALIZER 110.3 I-SLE Chan 40
LOM TURNO 266 SL
R-359
R-155
10 NM
1 min
133°
313°
R-021
1095
CORVALLIS 115.4 CVO Chan 101
2100 313° (4.4)
SCIOS I-SLE 11.3
2564
3500 021° (24.8)
R-031
3500 NoPT 313° (7.3)
2096
115.4 CVO Chan 101
(IF/IAF) GLORR I-SLE 18.5
5600 NoPT 313° (16.1)
R-049
(IAF) JAIME I-SLE 34.6

ELEV 214
MIRL Rwy 16-34 L
REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L



FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



CATEGORY	A	B	C	D
S-ILS 31	*414/24 200 (200-½)			
S-LOC 31	960/24 746 (800-½)	960/40 746 (800-¾)	960-1¾ 746 (800-1¾)	960-2 746 (800-2)
CIRCLING	960-1 746 (800-1)	960-1¼ 746 (800-1¼)	960-2¼ 746 (800-2¼)	1000-2½ 786 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SLE	APP CRS	Rwy Idg	5811
110.3	133°	TDZE	204
Chan 40		Apt Elev	214

LOC BC RWY 13

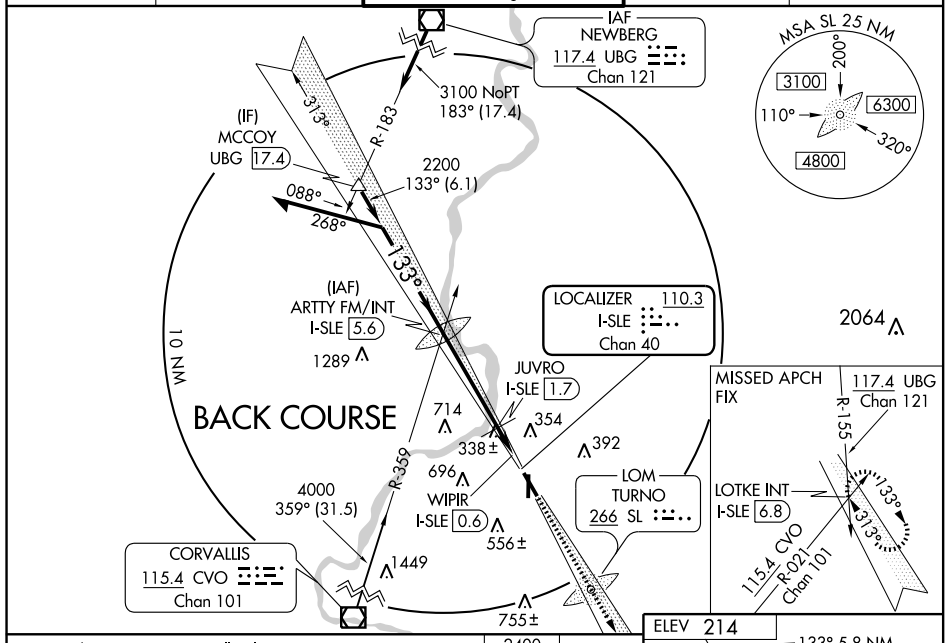
SALEM / MCNARY FIELD (SLE)

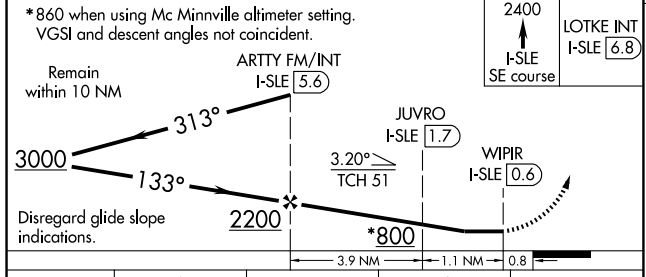
T NA Inoperative table does not apply to S-13 Cat C or when using McMinnville altimeter setting to S-13 Cat C and JUVRO fix minimums Cat C.
ARTTY INT not authorized for final approach fix.
When local altimeter setting not received, use McMinnville altimeter setting and increase all MDA 60 feet and Cat C and D visibility ¼ mile, for JUVRO fix minimums, increase S-13 Cat C visibility ½ mile, Cat D visibility ¼ mile.

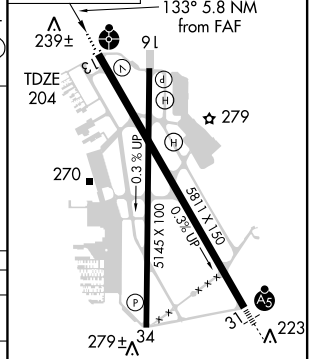
ODALS

MISSED APPROACH: Climb to 2400 via I-SLE SE course to LOTKE INT/I-SLE 6.8 DME and hold, continue climb-in-hold to 2400.

ATIS	SEATTLE CENTER	SALEM TOWER ★	GND CON	UNICOM
124.55	125.8 291.7	119.1 (CTAF) L 257.2	121.9	122.95







REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L
MIRL Rwy 16-34 L
269±

CATEGORY	A	B	C	D
S-13	800-¾ 596 (600-¾)		800-1½ 596 (600-1½)	800-1¾ 596 (600-1¾)
CIRCLING	900-1 686 (700-1)	940-1 726 (800-1)	940-2 726 (800-2)	1000-2½ 786 (800-2½)
JUVRO FIX MINIMUMS				
S-13	600-¾ 396 (400-¾)			600-1¼ 396 (400-1¼)
CIRCLING	900-1 686 (700-1)	940-1 726 (800-1)	940-2 726 (800-2)	1000-2½ 786 (800-2½)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NW-1. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SLE	APP CRS	Rwy Idg 5811
110.3	313°	TDZE 214
Chan 40		Apt Elev 214

LOC/DME RWY 31

SALEM / MCNARY FIELD (SLE)

MALSR

MISSED APPROACH: Climb to 4000 via I-SLE LOC northwest course to ARTTY FM/Int/I-SLE 5.6 DME and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE CENTER	SALEM TOWER ★	GND CON	UNICOM
124.55	125.8 291.7	119.1 (CTAF) L 257.2	121.9	122.95

ALTERNATE MISSED APCH FIX

LOM/INT TURNO SL I-SLE 5

EUG R-355

Procedure NA for arrivals at JAIME via V536 eastbound and arrivals at GLORR via V448 southbound.

MSA SL 25 NM

200° 3100 6300 110° 320° 4800

NEWBERG 117.4 UBG Chan 121

BATTLEGROUND 116.6 BTG Chan 113

ARTTY INT/FM I-SLE 5.6

BTG 44

3500 157° (30.4)

R-175

3000 175° (12.1)

3200 133° (10.6)

ENROUTE FACILITIES

FEEDER FACILITIES

10 NM

LOCALIZER 110.3 I-SLE Chan 40

714 354 392 696 556± 673± 755± 1449

I-SLE 3.1

LOM/IAF TURNO 266 SL

R-355 EUG

313° (6.3) 1700

TURNO INT I-SLE 5 1095

CORVALLIS 115.4 CVO Chan 101

R-359

R-031

178° 358° 133°

SCIOS I-SLE 11.3

3500 313° (7.3)

(IF/IAF) GLORR I-SLE 18.5

R-049 R-010

3500 017° (25.5)

EUGENE 112.9 EUG Chan 76

5600 NoPT 313° (16.1)

(IAF) JAIME I-SLE 34.6

ELEV 214

239± 91 13 31 279 270 0.3 % UP 5811 X 100 0.3% UP 5145 X 100 TDZE 214 279± 34 223 269±

313° 3.9 NM from FAF

REIL Rwys 13, 16 and 34 L

HIRL Rwy 13-31 L

MIRL Rwy 16-34 L

4000 ↑ I-SLE LOC

ARTTY INT I-SLE 5.6

TURNO LOM/INT I-SLE 5

Remain within 10 NM

133° 2600 313° 1700

I-SLE 1.1 I-SLE 2.5 I-SLE 3.1 3.50° TCH 55

960

1.4 NM 0.6 1.9 NM

CATEGORY	A	B	C	D
S-31	780/24	566 (600-½)	780/50 566 (600-1)	780/60 566 (600-1¼)
CIRCLING	900-1 686 (700-1)	940-1 726 (800-1)	940-2 726 (800-2)	1000-2½ 786 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86202 W31A	APP CRS 313°	Rwy Idg 5811 TDZE 214 Apt Elev 214

RNAV (GPS) RWY 31

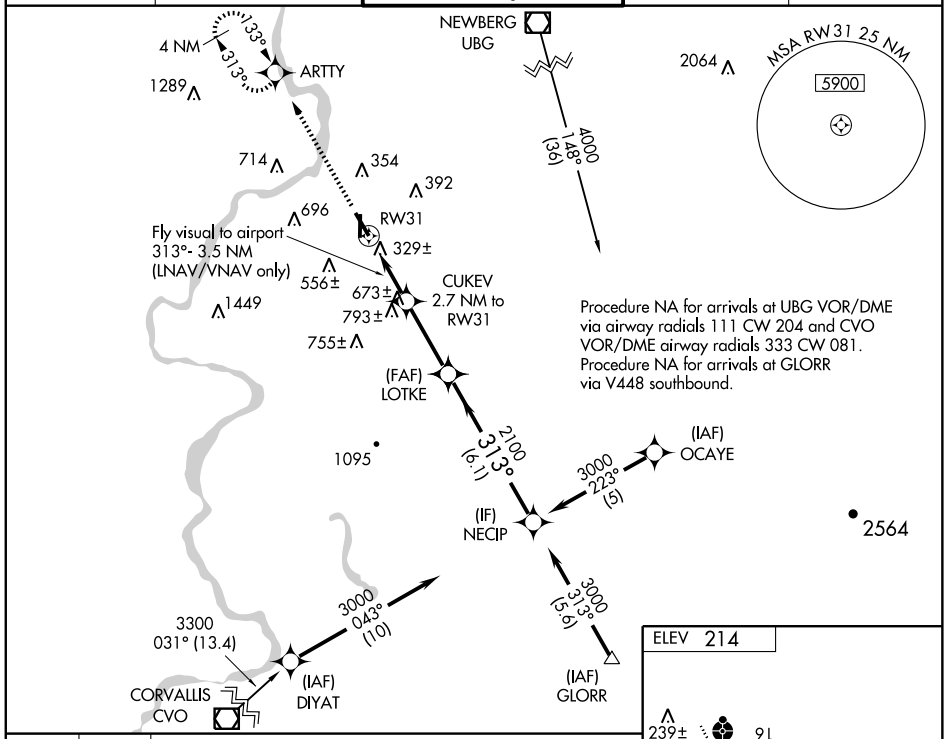
SALEM / MCNARY FIELD (SLE)

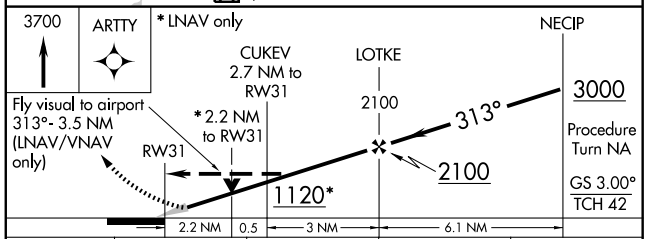
Inoperative table does not apply to LNAV/VNAV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use McMinnville altimeter setting and increase all DA 49 feet; increase all MDA 60 feet and LNAV and circling visibility Cats B/C/D ¼ mile. Baro-VNAV and VDP NA when using McMinnville altimeter setting.

MALSR

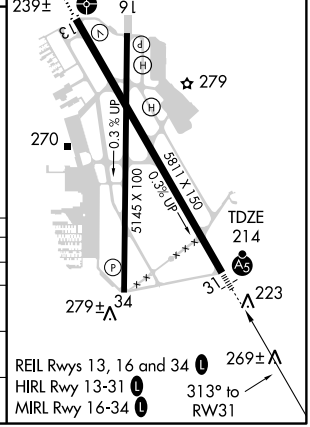
MISSED APPROACH: Climb to 3700 direct ARTTY and hold, continue climb-in-hold to 3700.

ATIS	SEATTLE CENTER	SALEM TOWER ★	GND CON	UNICOM
124.55	125.8 291.7	119.1 (CTAF) L 257.2	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	414/24 200 (200-½)			
LNAV/VNAV DA	1334-2 1120 (1200-2)		1334-3 1120 (1200-3)	
LNAV MDA	940/24 726 (800-½)		940-1½ 726 (800-1½)	940-1¾ 726 (800-1¾)
CIRCLING	940-1 726 (800-1)		940-2 726 (800-2)	1000-2½ 786 (800-2½)



REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L
MIRL Rwy 16-34 L

NW-1, 14 JAN 2010 to 11 FEB 2010

SALEM TWO DEPARTURE

SL-361 (FAA)

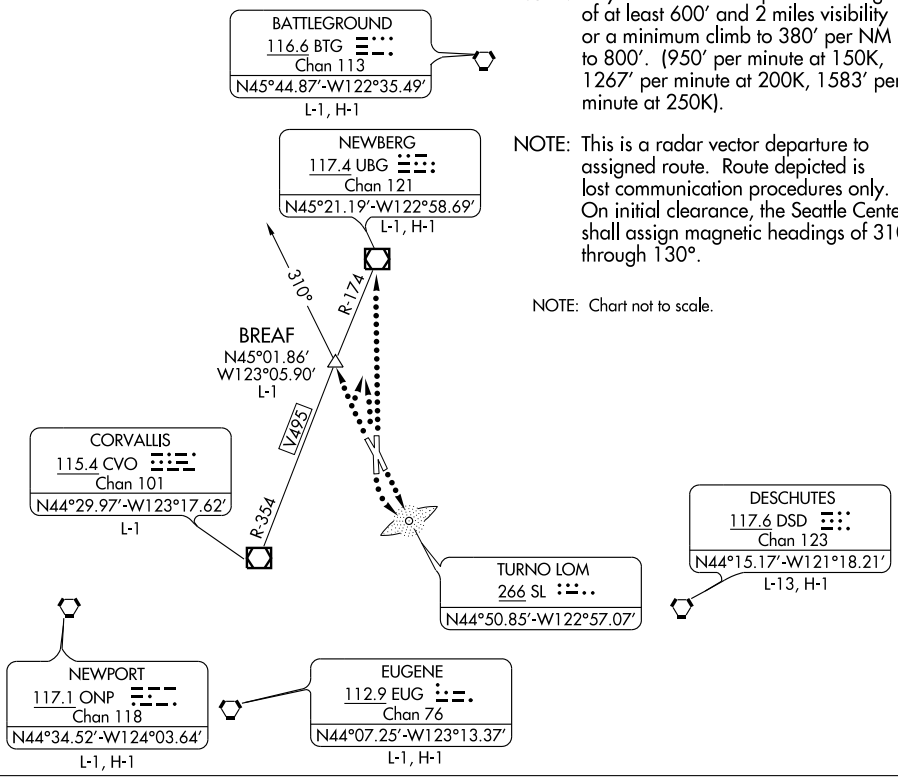
GND CON
121.9
SALEM TOWER ★
119.1 (CTAF) 257.2
SEATTLE CENTER
125.8 291.7

NOTE: Rwy 13-This SID requires a ceiling of at least 600′ and 2 miles visibility, or a minimum climb of 240′ per NM to 800′. (600′ per minute at 150K, 800′ per minute at 200K, 1000′ per minute at 250K).

NOTE: Rwy 16 - This SID requires a ceiling of at least 600′ and 2 miles visibility or a minimum climb to 380′ per NM to 800′. (950′ per minute at 150K, 1267′ per minute at 200K, 1583′ per minute at 250K).

NOTE: This is a radar vector departure to assigned route. Route depicted is lost communication procedures only. On initial clearance, the Seattle Center shall assign magnetic headings of 310° through 130°.

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

Climb via specified turn and heading, contact Seattle Center for vectors to assigned route.
LOST COMMUNICATIONS: If not in contact with Seattle Center after reaching 2000′, continue climb to assigned altitude.
Take-off runways 13 and 16: (Rwy 16 turn left) proceed direct to SL LOM thence via (assigned route).
Take-off runways 31 and 34: (Rwy 31 right turn) proceed direct to UBG VOR/DME thence via (assigned route).
Helicopter only-runways 31 and 34: (Rwy 34 turn left) intercept and proceed outbound on the SL LOM 310° bearing to BREAF INT, thence via (assigned route).

SCAPPOOSE, OREGON

AL-6314 (FAA)

LOC/DME I-FKO	APP CRS	Rwy Idg	5100
111.1	149°	TDZE	55
Chan 48		Apt Elev	55

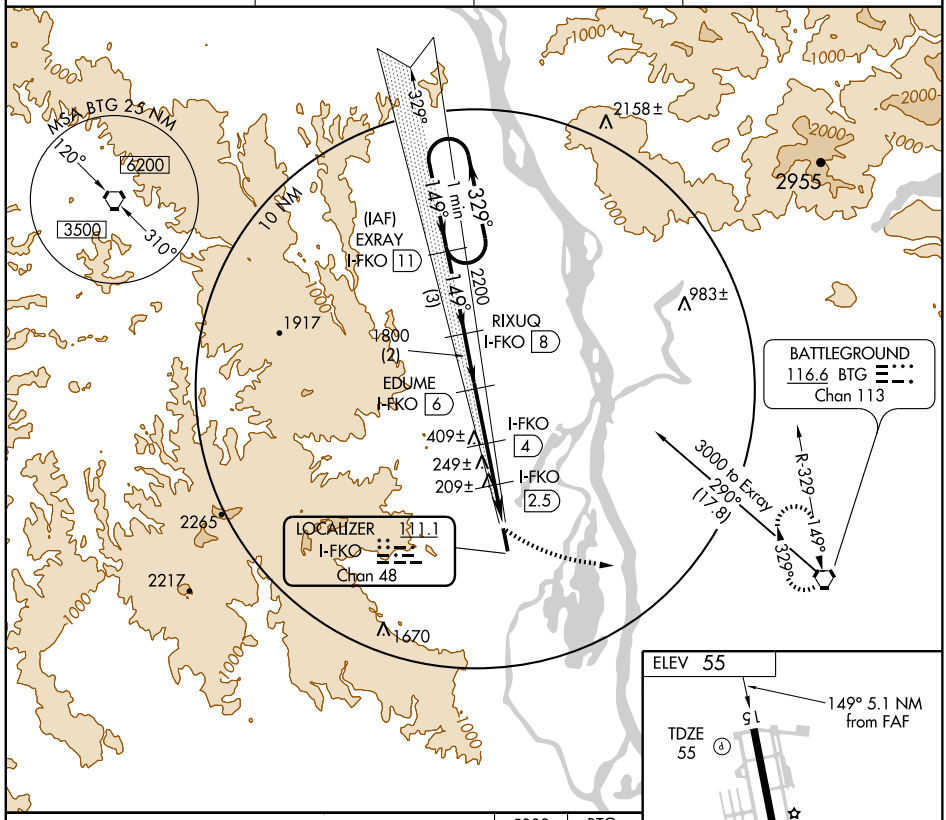
LOC/DME RWY 15

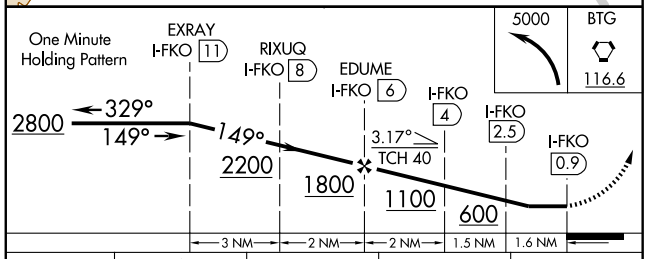
SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

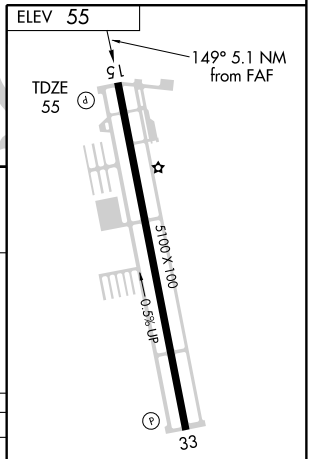
Circling not authorized west of Rwy 15-33.

MISSED APPROACH: Climbing left turn to 5000 direct BTG VORTAC and hold.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
135.875	124.35 299.2	121.65	122.8 (CTAF)







CATEGORY	A	B	C	D
S-15	460-1 405 (500-1)		460-1¼ 405 (500-1¼)	
CIRCLING	480-1 425 (500-1)	520-1 465 (500-1)	520-1½ 465 (500-1½)	620-2 565 (600-2)

REIL Rwy 15
MIRL Rwy 15-33

NW-1, 14 JAN 2010 to 11 FEB 2010

SCAPPOOSE, OREGON

AL-6314 (FAA)

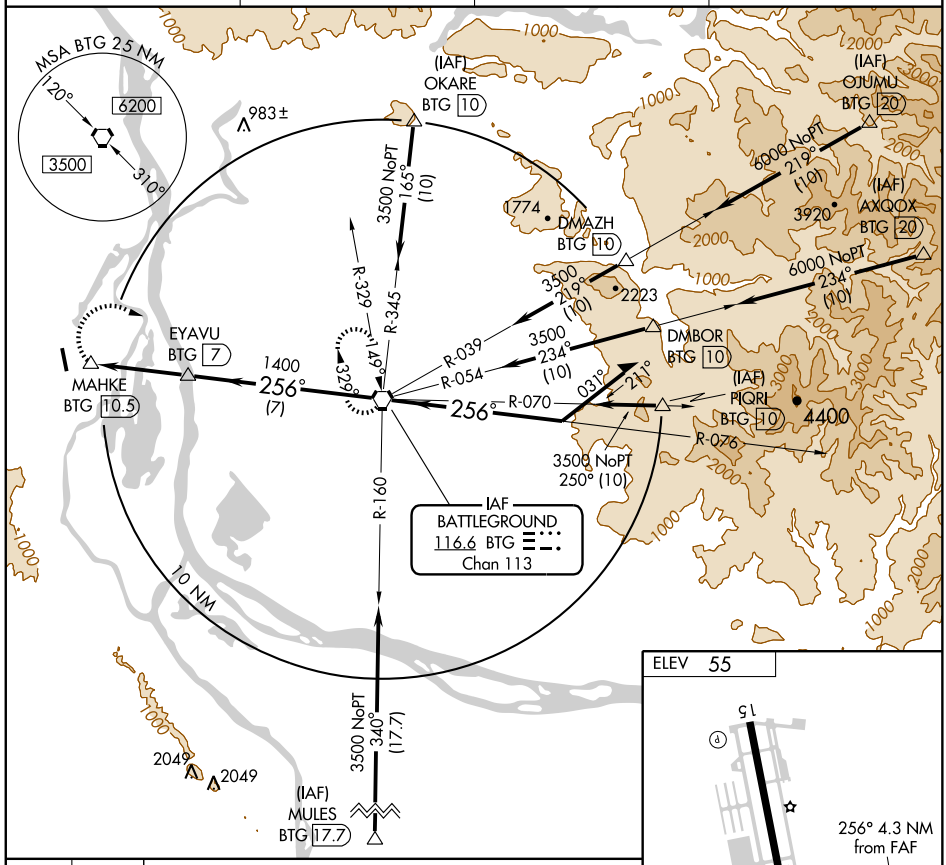
VORTAC BTG 116.6 Chan 113	APP CRS 256°	Rwy Idg N/A TDZE N/A Apt Elev 55

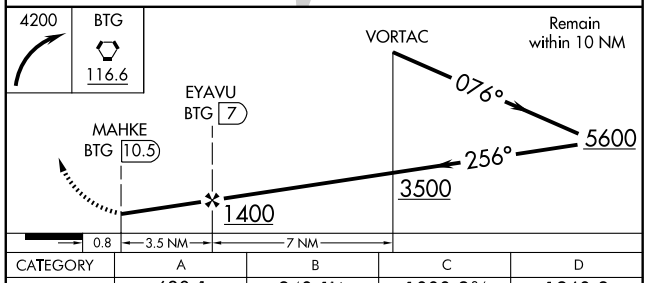
VOR/DME or GPS-A

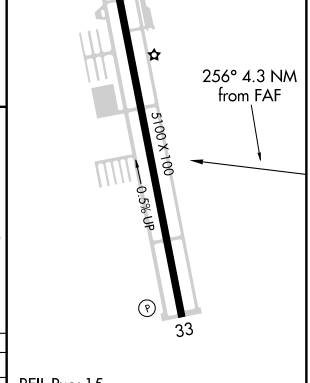
SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

MISSED APPROACH: Climbing right turn to 4200 direct BTG VORTAC and hold.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
135.875	124.35 299.2	121.65	122.8 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	680-1 625 (700-1)	940-1¼ 885 (900-1¼)	1000-2¾ 945 (1000-2¾)	1260-3 1205 (1300-3)

REIL Rwy 15
MIRL Rwy 15-33

NW-1, 14 JAN 2010 to 11 FEB 2010

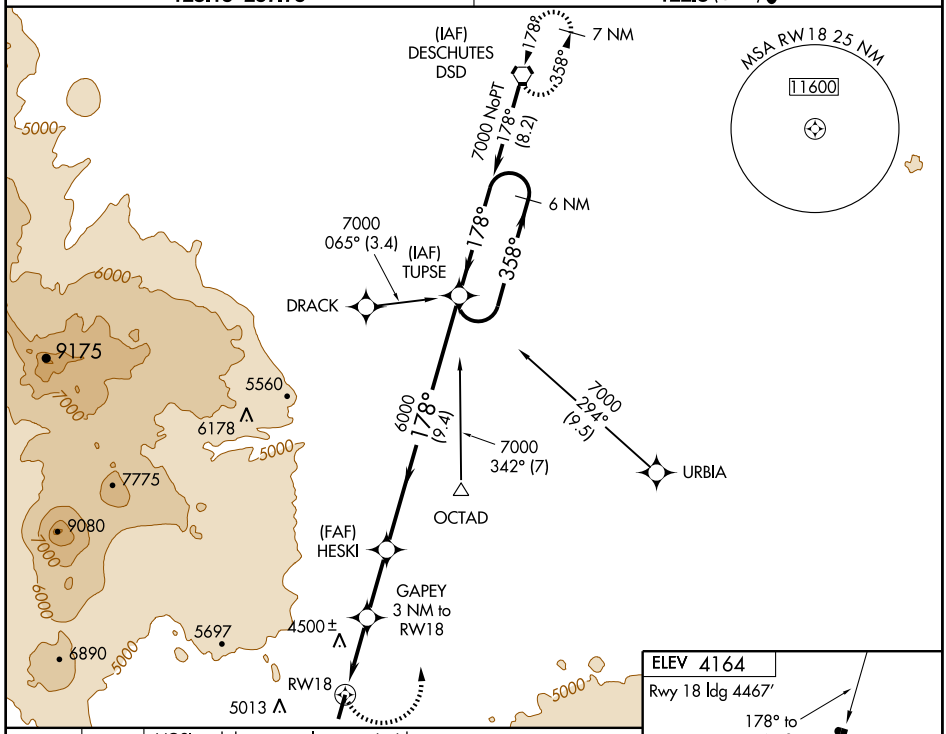
APP CRS		
178°	Rwy Idg	4467
	TDZE	4162
	Apt Elev	4164

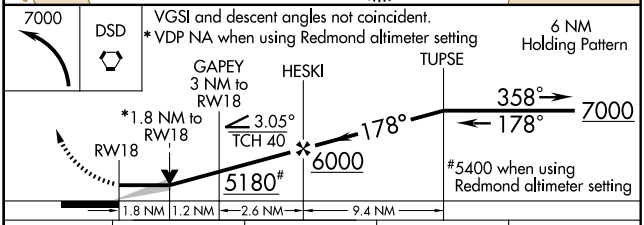
RNAV (GPS) RWY 18
SUNRIVER (S21)

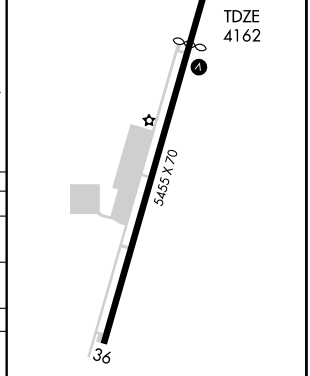
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Circling not authorized at night to Rwy 36.
Obtain local altimeter setting on CTAF; when not received, use Redmond altimeter setting.

MISSED APPROACH: Climbing left turn to 7000 direct DSD VORTAC and hold.

SEATTLE CENTER	UNICOM
128.15 257.75	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	4760-1 598 (600-1)		4760-1½ 598 (600-1½)	4960-2½ 798 (800-2½)
CIRCLING	4920-1 756 (800-1)	4920-1¼ 756 (800-1¼)	5040-2½ 876 (900-2½)	5380-3 1216 (1300-3)
REDMOND ALTIMETER SETTING MINIMUMS				
LNAV MDA	4980-1 818 (900-1)	4980-1¼ 818 (900-1¼)	4980-2½ 818 (900-2½)	4980-2¾ 818 (900-2¾)
CIRCLING	5140-1¼ 976 (1000-1¼)	5140-1½ 976 (1000-1½)	5260-3 1096 (1100-3)	5580-3 1366 (1400-3)

LIRL Rwy 18-36 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME RWY 18

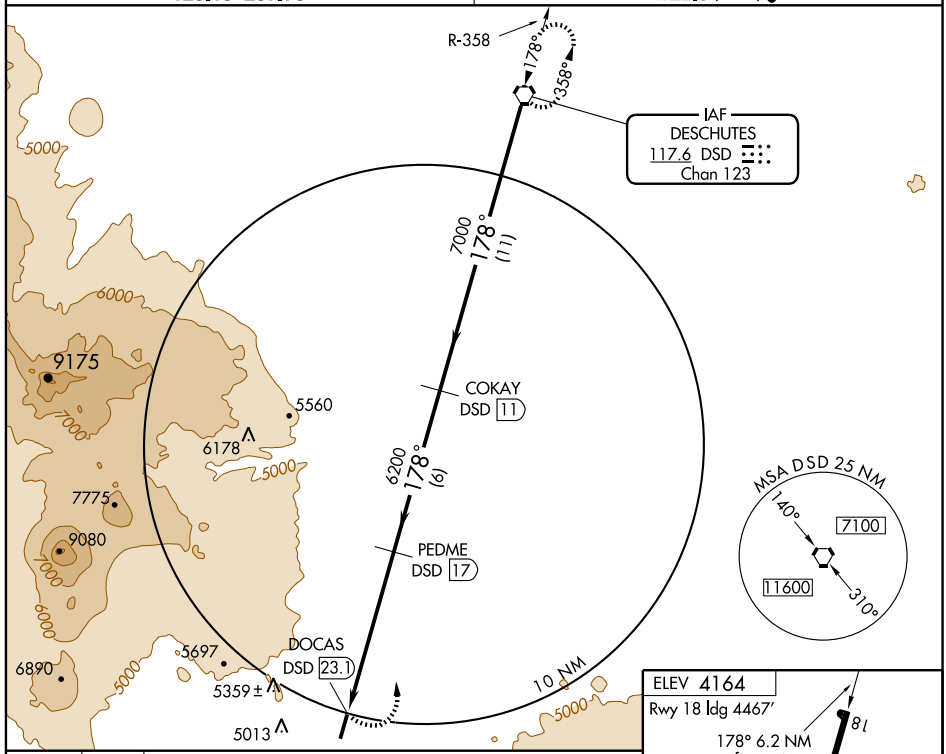
SUNRIVER (S21)

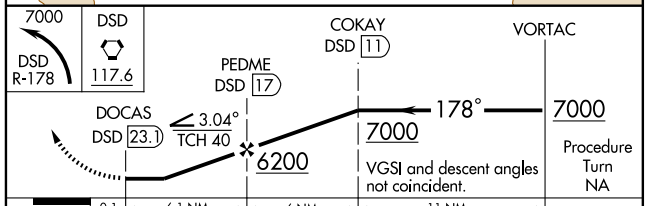
VORTAC DSD	APP CRS	Rwy Idg	4467
117.6	178°	TDZE	4162
Chan 123		Apt Elev	4164

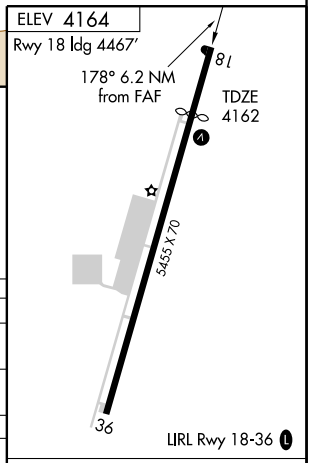
T NA — Obtain local altimeter setting on CTAF; when not received, use Redmond altimeter setting. Circling NA at night to Rwy 36.

MISSED APPROACH: Climbing left turn to 7000 via DSD R-178 to DSD VORTAC and hold.

SEATTLE CENTER	UNICOM
128.15 257.75	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-18	5440-1¼ 1278 (1300-1¼)	5440-1½ 1278 (1300-1½)	5440-3 1278 (1300-3)	
CIRCLING	5440-1¼ 1276 (1300-1¼)	5440-1½ 1276 (1300-1½)	5440-3 1276 (1300-3)	
REDMOND ALTIMETER SETTING MINIMUMS				
S-18	5660-1¼ 1498 (1500-1¼)	5660-1½ 1498 (1500-1½)	5660-3 1498 (1500-3)	
CIRCLING	5660-1¼ 1496 (1500-1¼)	5660-1½ 1496 (1500-1½)	5660-3 1496 (1500-3)	

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-DLS	APP CRS	Rwy Idg	4451
109.35	234°	TDZE	243
Chan 30 (Y)		Apt Elev	247

COPTER LDA/DME RWY 25

THE DALLES/COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

Glide slope provided by standard glide slope equipment. If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 1200 then climbing left turn to 7000 via heading 125° and LTJ VOR/DME R-165 to JIREN/LTJ 15 DME and hold, continue climb-in-hold to 7000.

ASOS	SEATTLE CENTER	UNICOM
135.175	119.65 257.6	123.0 (CTAF) L

LDA/GLIDE SLOPE

KLICKITAT 112.3 LTJ Chan 70

LOCALIZER 109.35 I-DLS Chan 30 (Y) LOC offset 15°

R-080 R-165

10 NM

(IF/IAF) VECCU I-DLS 13 LTJ 10

LIREY I-DLS 8.3

JIREN LTJ 15

NoPT for arrival at VECCU on V112 westbound.

MSA LTJ 30 NM: 175°–085° 13600; 085°–175° 7100; 175°–265° 12600; 265°–355° 4600; 355°–175°

ELEV 247

Rwy 7 ldg 4207′
Rwy 12 ldg 4897′
Rwy 25 ldg 4451′

TDZE 243

4647 X 100 0.7% UP

3097 X 100 0.8% UP

234°

REIL Rwy 30 L
MIRL Rwys 7-25 and 12-30 L

1200	7000	LTJ R-165 112.3	JIREN △
↑	125°		

Use I-DLS DME when on the localizer course.

VECCU I-DLS 13 — One Minute Holding Pattern

LIREY I-DLS 8.3

054° 234° 5300

234° 4000

GS 4.20° TCH 43

8.2 NM 4.7 NM

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	COPTER	B	C	D
H-LDA/GS 25	783-1½ 540 (600-1½)	NA		

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-DLS	APP CRS	Rwy Idg	4451
109.35	234°	TDZE	243
Chan 30 (Y)		Apt Elev	247

LDA/DME RWY 25

THE DALLES/
COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

Circling requires descent on GS to MDA.
Glide slope provided by standard glide slope equipment.
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 1600 then climbing left turn to 7000 via heading 135° and LTJ VOR/DME R-165 to JIREN/LTJ 15 DME and hold, continue climb-in-hold to 7000.

ASOS	SEATTLE CENTER	UNICOM
135.175	119.65 257.6	123.0 (CTAF)

LDA/GLIDE SLOPE

KLICKITAT
112.3 LTJ
Chan 70

NoPT for arrival at VECCU on V112 westbound.

R-080

054° 1 min 234°

4000 2969 234° (4.7)

(IF/IAF)
VECCU
I-DLS 13
LTJ 10

LIREY
I-DLS 8.3

1450±

LOCALIZER 109.35
I-DLS
Chan 30 (Y)
LOC offset 15°

R-165

10 NM

JIREN
LTJ 15

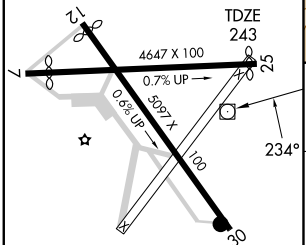
165° 345°

2613±

MSA LTJ 30 NM
13600 7100
085° 265°
12600 4600
175° 355°

ELEV 247

Rwy 7 ldg 4207′
Rwy 12 ldg 4897′
Rwy 25 ldg 4451′



REIL Rwy 30
MIRL Rwys 7-25 and 12-30

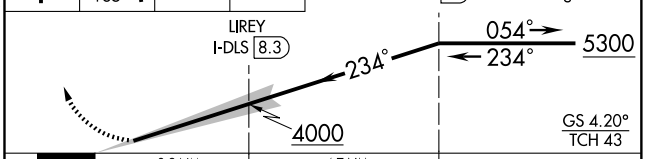
Knots	60	90	120	150	180
Min:Sec					

1600	7000	LTJ	JIREN
	135°	R-165	
		112.3	

Use I-DLS DME when on the localizer course.

VECCU
I-DLS 13

One Minute Holding Pattern



CATEGORY	A	B	C	D
S-LDA/GS 25	1368-2¾	1125 (1200-2¾)	NA	
CIRCLING	1380-3	1133 (1200-3)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
335°	TDZE	N/A
	Apt Elev	247

RNAV (GPS)-A

THE DALLES/COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

DME/DME RNP-0.3 NA. Circling to Rwy 7 NA at night.
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 4500 direct CEVBI and hold.

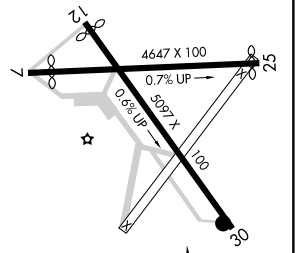
ASOS	SEATTLE CENTER	UNICOM
135.175	119.65 257.6	123.0 (CTAF) L

Procedure NA for arrivals at CEVBI via V497 southeastbound

2729 3129 3220 2510± 2969 2120 1450± 2345 1062 356 709 1037± 830 4200 3343 5920 5651 2613± 12600

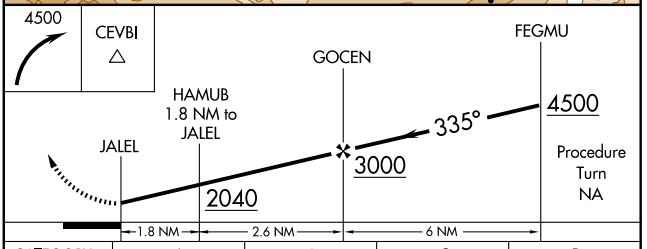
(MAP) JALEL
HAMUB 1.8 NM to JALEL
(FAF) GOCEN
(IF) FEGMU
(IAF) CEVBI
335° (6) 3000
4500 240° (14.8)
18° 4 NM 298°
MSA JALEL 25 NM

ELEV 247
Rwy 7 ldg 4207′
Rwy 12 ldg 4897′
Rwy 25 ldg 4451′



335° to JALEL

REIL Rwy 30 L
MIRL Rwy 7-25 and 12-30 L

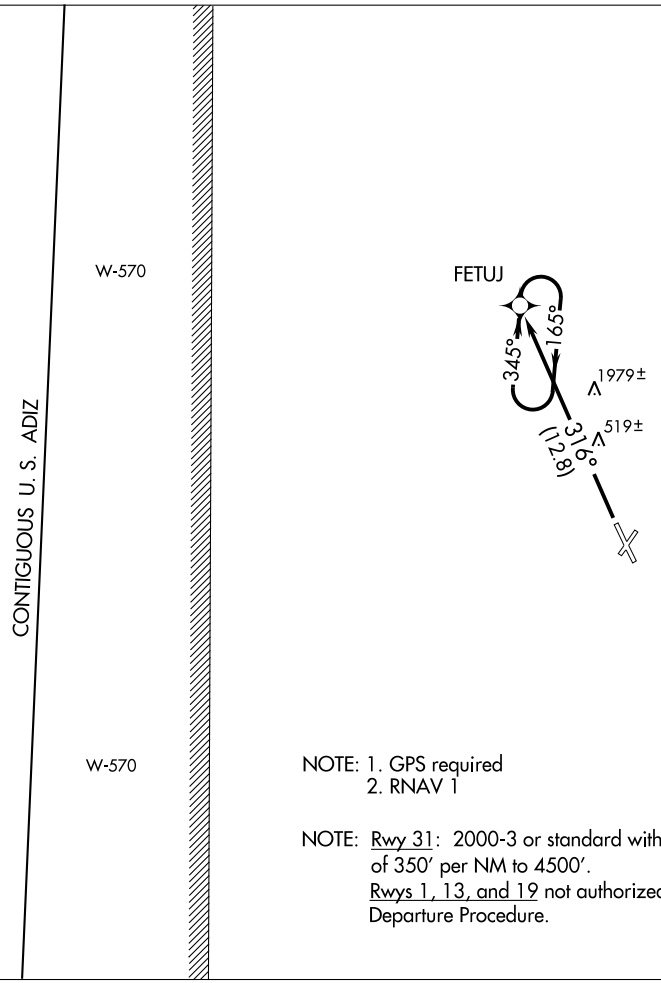


CATEGORY	A	B	C	D
CIRCLING	1320-1¼ 1073 (1100-1¼)	1320-1½ 1073 (1100-1½)	1320-3 1073 (1100-3)	1360-3 1113 (1200-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

FETUJ ONE DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
124.2 317.6
McMINNVILLE RADIO
122.45



NOTE: 1. GPS required
2. RNAV 1

NOTE: Rwy 31: 2000-3 or standard with minimum climb of 350′ per NM to 4500′.
Rwys 1, 13, and 19 not authorized for this Departure Procedure.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 31: Climb to 5000 via 316° course to FETUJ WP.

Northbound aircraft continue on course to assigned altitude.

Southbound aircraft continue climb in FETUJ WP holding pattern (south, right turn, 345° inbound) to MEA for assigned route before proceeding on course.

NW-1, 14 JAN 2010 to 11 FEB 2010

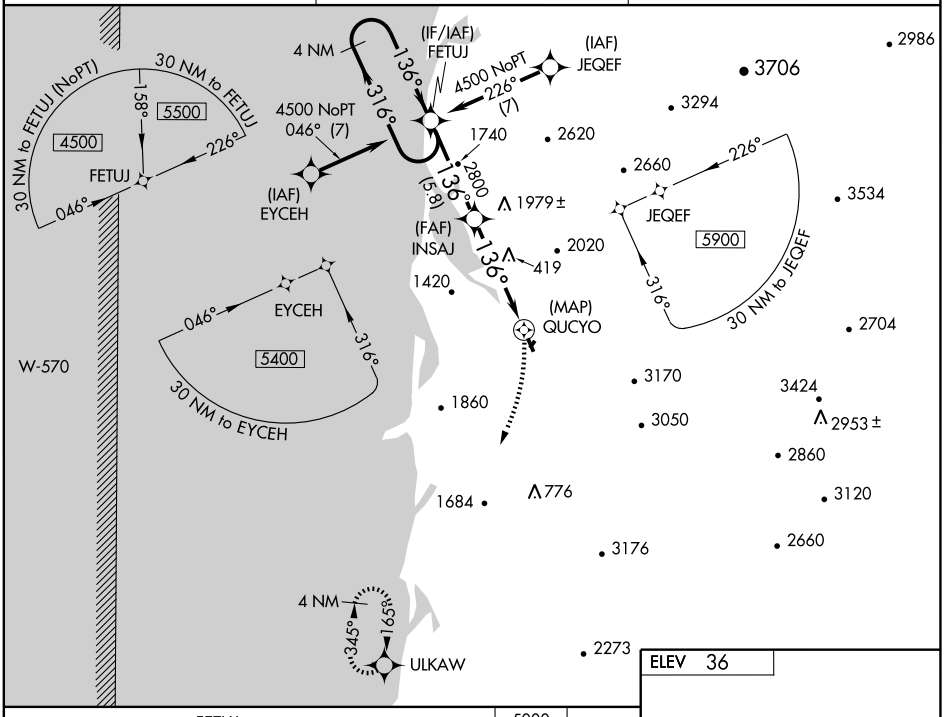
APP CRS	Rwy Idg	5001
136°	TDZE	28
	Apt Elev	36

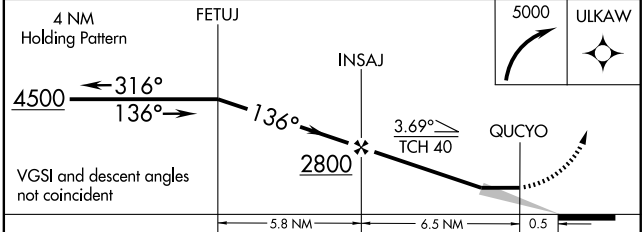
RNAV (GPS) RWY 13
TILLAMOOK (TMK)

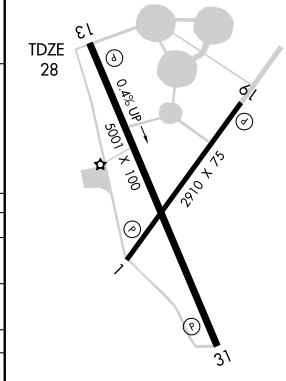
When local altimeter setting not received, use Astoria altimeter setting.
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
Circling NA Rwy 1-19 at night.

MISSED APPROACH: Climbing right turn to 5000 direct ULKAW WP and hold.

AWOS-3	SEATTLE CENTER	UNICOM
120.0	124.2 317.6	122.8 (CTAF) L







REIL Rwy 13
MIRL Rwys 1-19 and 13-31 L

CATEGORY	A	B	C	D
LNAV MDA	760-1 732 (800-1)		760-2 732 (800-2)	NA
CIRCLING	880-1 844 (900-1)	920-1¼ 884 (900-1¼)	920-2¾ 884 (900-2¾)	NA
ASTORIA ALTIMETER SETTING MINIMUMS				
LNAV MDA	1280-1¼ 1252 (1300-1¼)	1280-1½ 1252 (1300-1½)	1280-3 1252 (1300-3)	NA
CIRCLING	1420-1¼ 1384 (1400-1¼)	1460-1½ 1424 (1500-1½)	1460-3 1424 (1500-3)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME — ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L[1]**
RNAV (GPS) Y Rwy 10R[2]
RNAV (GPS) Y Rwy 28L[2]
VOR/DME or TACAN Rwy 10L[1]
VOR/DME or TACAN Rwy 28L[1]
[1]Category E, 900-3.
[2]Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31**[1]
VOR/DME Rwy 31[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B

NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10**[1]
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28

NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**

Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15**[1]
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3

[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**

ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27**[1]
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22**[1]
VOR or GPS-A[2]

[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1

NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**

Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**

NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B

NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**

Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**

Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25**[1]
RNAV (GPS) Rwy 29
VOR-B[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA
EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR
MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA
SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT
FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY
GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT
WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT
DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID
GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)
FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT
GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY
SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID
FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT
HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27**[12]
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24**[1]
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20**[1]
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1**[1]
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2**[1]
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26**[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B**[1]
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14**[12]
LOC/DME BC-B[23]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11**[1]
RNAV (GPS) Y Rwy 11[23]
RNAV (RNP) Z Rwy 11[2]**,**800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R**[1]
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4**[1]
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17**[12]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[23]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R**[12]
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25**[1]
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7

NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]

NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL..... **ILS or LOC Rwy 21**[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]

[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L**[1]
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]

[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12**[1]
RNAV (GPS) Rwy 12[2]

[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **NDB or GPS-A**[1]
VOR or GPS Rwy 22,1000-3[2]

[1]Category D, 1000-3.
[2]NA when Rawlins FSS closed.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22**[1]
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16**[1]
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19**[1]
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

ROCK SPRINGS, WY

ROCK SPRINGS SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31**[12]
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R**[1]
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1**[1]
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R**[1]
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[3]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A,B, 1000-2; Categories C,D, 1000-3

SPOKANE INTL ..... **ILS or LOC Rwy 3**[1]
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

NAME ALTERNATE MINIMUMS

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17**[1]
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL ..... **ILS or LOC Rwy 25**[1]
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20**[1]
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/ MCALLISTER FIELD ..... **ILS Y Rwy 27**[12]
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

CHEYENNE, WY

Amdt 1B, MAY 8, 2008 (FAA) ELEV **6159**

CHEYENNE RGNL/JERRY OLSON FIELD

RADAR - 124.55 263.075 NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	27	3.0°/55/918	ABCDE	**6321**/24	200	(200-½)				
ASR	9		ABC	**6500**-1	357	(400-1)	DE	**6500**-1¼	357	(400-1¼)
	27		ABC	**6520**/24	399	(400-½)	DE	**6520**/50	399	(400-1)
CIR	ALL		AB	**6660**-1	501	(600-1)	C	**6660**-1½	501	(600-1½)
			D	**6720**-2	561	(600-2)	E	**6960**-2¾	801	(900-2¾)

For inoperative MALSR increase, PAR 27 category E visibility to RVR 4000, ASR 27 category D visibility to RVR 6000 and ASR 27 category E visibility to 1½. PAR not available when ASR out of service.

GRAY AAF (KGRF),

FORT LEWIS, WA (09155 USA) **ELEV 300**

RADAR - (E) 128.2 139.925 239.0 317.4 NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR [13]	15	3.0°/55/947	ABCD	**499**/40	200	(200-¾)
	33 [2]	3.0°/39/730	ABCD	**500**-¾	200	(200-¾)

[1]Opr Mon-Fri 1600-0759Z++, exc federal holidays. POC DSN 357-4953 or C253-967-4953. Svc incl PAR and apch mnt of ILS and NDB. [2]PAR not authorized when R6703D is active. [3]Circling not authorized.

OPS 138.6
Contact Seattle approach for vectors to Final on 120.1 290.9
Missed Approach:
Rwy 15: Climb to 700, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 700, then climbing left turn to 2000 direct GR LOM and hold NW, RT, 147° inbound (ADF REQUIRED).
Rwy 33: Climb to 700, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 2000 direct GR LOM and hold NW, RT, 147° inbound (ADF REQUIRED).
LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

OAK HARBOR (OKH), WA

Amdt 1A, Mar 12, 2009 (FAA) **ELEV 193**

A J EISENBERG

RADAR - 118.2 285.65 ▽ ⚠NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	7		AB	620-1	427	(500-1)
			CD	NA		
CIR	All Rwy		A	620-1	427	(500-1)
			B	660-1	467	(500-1)
			CD	NA		

When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet. Circling north of Rwy 7-25 NA at night. Visibility reduction by helicopters NA.

WHIDBEY ISLAND NAS (KNUW), (AULT FLD) WA (09071 USN) ELEV 47

RADAR - (E) 126.05x 126.85x 266.8x 299.6x 310.8x 322.5x 327.0x 343.75x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	25[2 3 10]	3.0°/40/718	ABCDE	**228**-½	200	(200-½)
	14[5 11]	3.0°/49/947	ABCDE	**139**-¼	100	(100-¼)
	7	3.0°/50/961	ABCDE	**125**-½	100	(100-½)
	32[2 10]	3.0°/34/776	ABCDE	**147**-¼	100	(100-¼)
W/O GS	25[3 6]		ABC	**480**-¾	452	(500-¾)
			DE	**480**-1	452	(500-1)
	14[7 11]		AB	**340**-½	301	(300-½)
			CDE	**340**-¾	301	(300-¾)
	7		ABCDE	**300**-1	275	(300-1)
	32[8 10]		ABC	**500**-¾	453	(500-¾)
			DE	**500**-1	453	(500-1)
ASR	7		AB	**440**-1	415	(400-1)
			CD	**440**-1¼	415	(400-1¼)
			E	**440**-1½	415	(400-1½)
	14[4 11]		AB	**600**-½	561	(600-½)
			C	**600**-1	561	(600-1)
			D	**600**-1¼	561	(600-1¼)
			E	**600**-1½	561	(600-1½)
	32[8 11]		AB	**680**-½	633	(700-½)
			C	**680**-1¼	633	(700-1¼)
			D	**680**-1½	633	(700-1½)
			E	**680**-1¾	633	(700-1¾)
	25[4]		AB	**760**-½	732	(800-½)
			C	**760**-1½	732	(800-1½)
			D	**760**-1¾	732	(800-1¾)
			E	**760**-2	732	(800-2)
CIR[9]			A	**780**-1	733	(800-1)
			B	**800**-1¼	753	(800-1¼)
			C	**800**-2¼	753	(800-2¼)
			D	**860**-2¾	813	(900-2¾)
			E	**1100**-3	1053	(1100-3)

[1]No-NOTAM MP: PAR 1600-0800Z++ Mon. [2]When ALS inop, increase vis CAT ABCDE to ¾ mile. [3]Caution: Trees 265' MSL, 3270' from THLD, 1647' right of RCL. [4]When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 2 miles, CAT E to 2¼ miles. [5]When ALS inop, increase CAT ABCDE vis to ½ mile. [6]When ALS inop, increase vis CAT ABC to 1¼ miles, CAT DE to 1½ miles. [7]When ALS inop, increase vis CAT ABCDE to 1 mile. [8]When ALS inop, increase vis CAT ABC to 1¼ mile, CAT DE to 1½ mile. [9]When CIRCLING to RWY 25 or 32, increase vis CAT A to 1¼ mile. [10]Amdt 2. [11]Amdt 1.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 16,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 34,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME — TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 16, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 16,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 34,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.
NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE,ID

BOISE AIR TERMINAL (GOWEN FIELD)

DEPARTURE PROCEDURE: **Rwys 28L,28R,** turn left **Rwys 10L,10R**, turn right. Climb on BOI R-214 within 20 NM to cross BOI VORTAC at or above MEA/MCA for direction of flight.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.
DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.
DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...
...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.
NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.
DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI

TAKE-OFF MINIMUMS: **All runways,** cross departure end of runway at or above 35' AGL.
DEPARTURE PROCEDURE: **All runways,** climb direct BURLEY (BYI) VOR/DME. Continue climb on R-305 within 10 miles to cross BYI VOR/DME: R-024 CW R-054 at or above 5500; R-055 CW R-240 at or above 8000; R-241 CW R-023 at or above 5900.
NOTE: **Rwy 2,** bridge 252' from departure end of runway, 513' left of centerline, 110' AGL/4195' MSL. Stack 2205' from departure end of runway, 857' right of centerline, 79' AGL/4236' MSL. Elevator 4092' from departure end of runway, 297' right of centerline, 133' AGL/4283' MSL. **Rwy 20,** antenna 523' from departure end of runway, 338' right of centerline, 43' AGL/4217' MSL. **Rwy 24**, tree 630' from departure end of runway, 521' right of centerline, 41' AGL/4215' MSL. Grain elevator 3106' from departure end of runway, 163' left of centerline, 137' AGL/4317' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.
DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading. **All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.
NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .**Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/ 6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 1500-2 or std. with a min. climb of 250' per NM to 6800. **Rwy 22**, 1600-2 or std. with a min. climb of 340' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 4, 22**, turn left. **All aircraft** climb direct COD VOR/DME. Climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above: COD R-350 CW R-170, 6000; or R-171 CW R-349, 11800.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FLD

TAKE-OFF MINIMUMS: **Rwy 5**, CAT A,B, 1700-2 or std. with a min. climb of 230' per NM to 4000. CAT C,D, 2600-2 or std. with a min. climb of 320' per NM to 5400.

DEPARTURE PROCEDURE: **Rwys 1,5**, turn left, climb via COE R-005 to 5400, reverse course, continue climb direct COE VOR. **Rwy 19**, turn right. **Rwy 23,** turn left, climb via COE R-232 to 5000, reverse course, continue climb direct COE VOR.

COLSTRIP, MT

COLSTRIP (M46)

AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 360' per NM to 5600.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading; **Rwy 22,** climbing left turn to heading 130°; **Rwys 4,34,** climbing right turn to heading 210°; **All aircraft** intercept and continue climb via the 170° bearing from DPY NDB to intercept GEG R-006 to GEG VORTAC.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn...**Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)
AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)
ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID

IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.

DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)

FORT LEWIS, WA

. . . . . Rwy 15, 300-1*
Rwy 33, 300-1**

* Or standard with minimum climb of 430/NM to 500.
** Or standard with minimum climb of 380/NM to 600.
Rwy 15 climb runway heading to 700 then climbing left turn direct GR LOM. Rwy 33 climb runway heading direct GR LOM. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GR LOM climb on course. All others continue climb in GR holding pattern (Hold NW, RT, 147° inbound) to cross GR LOM at or above: 071° CW 134° bearing from GR LOM, 8500; 261° CW 329° bearing from GR LOM, 1500.

GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.

NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.

NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT

HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...

...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.

NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,**1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**,1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL**. Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76'AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44'AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58'AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/ 3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30**, 1200-2 or std. with a min. climb of 320' per NM to 1300.

DEPARTURE PROCEDURE: Departure procedure limited to CAT A,B aircraft. **Rwy 30**, climb straight ahead to 1500 then climbing right turn direct LSO NDB. Continue climb in holding pattern (N, right turns, 171° inbound) to cross LSO NDB at or above 3000 direct BTG VORTAC or MEA for route of flight.

KEMMERER, WY

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR

LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY

LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT

LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID

LEWISTON-NEZ PERCE COUNTY

DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT

LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.

DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR

LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT

LIBBY

TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT

MISSION FIELD (LVM)

AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.

DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR

MADRAS MUNI (S33)

ORIG-A 09043 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)

TACOMA, WA 09127

DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787'from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735'from DER, 314' right of centerline 30'AGL/4202' MSL. Road 207'from DER, 254'right of centerline, 15' AGL/4187'MSL.

NEWPORT,OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO,OR

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...
Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...
Rwy 25, climb direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ... **Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L,28R,** climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/88' MSL. **Rwy 28R,** multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)

AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091°CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)

AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)

AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ... ...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100'AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL

DEPARTURE PROCEDURE: Aircraft departing RIW R-280 CW R-170 climb on course. All others climb to 6600, then continue climb direct RIW VOR/DME to cross RIW VOR/DME at or above 7500 before proceeding on course.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY

DEPARTURE PROCEDURE: Climb direct OCS VORTAC. Aircraft departing OCS R-205 CW R-170 climb on course. All others climb in the OCS holding pattern (E, right turns, 260°inbound) to cross OCS VORTAC at or above 7300.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149'left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . . . . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . . . . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD

TAKE-OFF MINIMUMS: **Rwys 3L,3R,** std. w/ min. climb of 400' per NM to 3600, or 1600-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 360' per NM to 3100, or 1600-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3100, or 1600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course. **Rwys 21L, 21R,** climb to 2800, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course.

NOTE: **Rwy 3L,** multiple trees beginning 5000' from departure end of runway, 530' left of centerline, up to 104' AGL/2513' MSL. Tree 1854' from departure end of runway, 773' right of centerline, 54' AGL/2030' MSL, tree 2365' from departure end of runway, 798' right of centerline, 61' AGL/2037' MSL. **Rwy 3R,** multiple trees beginning 5016' from departure end of runway, 1033' left of centerline, up to 104' AGL/2529' MSL, pole 2.5 NM from departure end of runway, 2059' left of centerline, 62' AGL/2454' MSL, hangar 92' from departure end of runway, 341' right of centerline, 5' AGL/1967' MSL, NDB 925' from departure end of runway, 270' right of centerline, 25' AGL/1987' MSL, multiple trees beginning 1870' from departure end of runway, 271' right of centerline, up to 128' AGL/3560' MSL. **Rwy 21L,** pole 316' from departure end of runway, 302' left of centerline, 33' AGL/1992' MSL, tree 926' from departure end of runway, 362' left of centerline, 50' AGL/2006' MSL, building 1057' from departure end of runway, 158' left of centerline, 19' AGL/1975' MSL, building 1061' from departure end of runway, 110' left of centerline, 19' AGL/1975' MSL. Elevator 4080' from departure end of runway, 598' left of centerline, 134' AGL/2080' MSL. **Rwy 21R,** hangar 204' from departure end of runway, 496' left of centerline, 13' AGL/1969' MSL, pole 659' from departure end of runway, 404' left of centerline, 26' AGL/1979' MSL, building, 946' from departure end of runway, 230' left of centerline, 24' AGL/1973' MSL, pole 1399' from departure end of runway, 2' left of centerline, 33' AGL/1982' MSL, elevator 2655' from departure end of runway, 1097' left of centerline, 134' AGL/2080' MSL, tree 189' from departure end of runway, 511' right of centerline, 46' AGL/1979' MSL, tree 480' from departure end of runway, 404' right of centerline, 43' AGL/1979' MSL, pole 1252' from departure end of runway, 55' right of centerline, 29' AGL/1975' MSL, pole 1427' from departure end of runway, 13' right of centerline, 33' AGL/1982' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A,B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C,D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .**Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course ...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E,right turns,253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

LOC I-AWO	APP CRS	Rwy Idg	5332
111.5	339°	TDZE	131
		Apt Elev	137

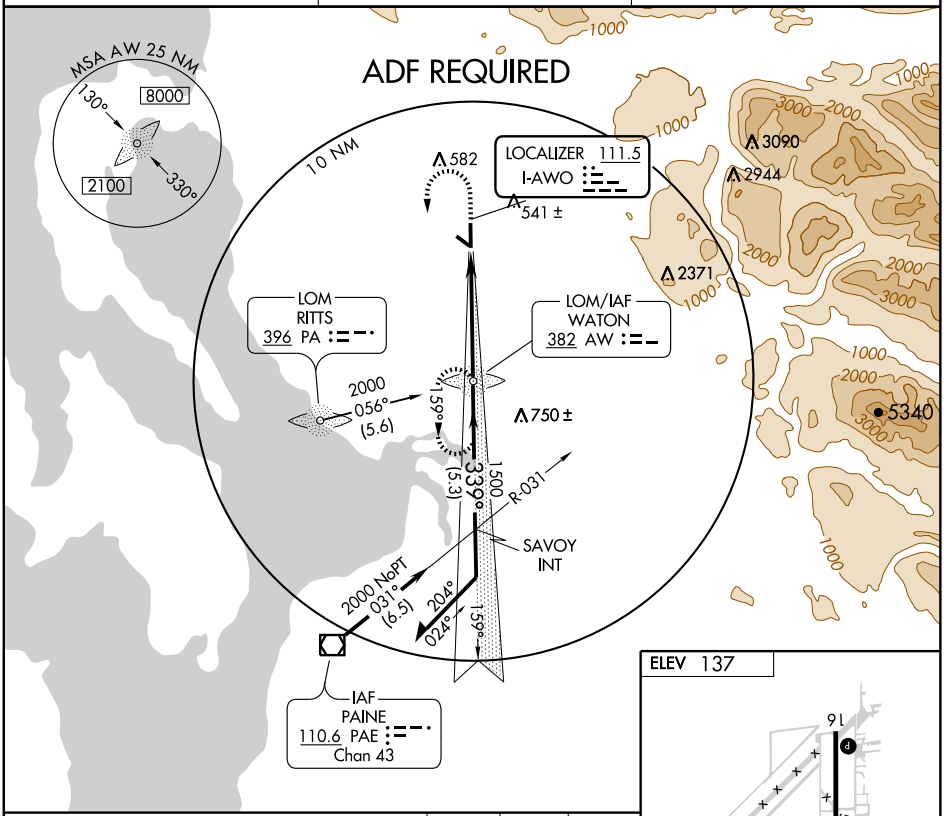
LOC RWY 34
ARLINGTON MUNI (AWO)

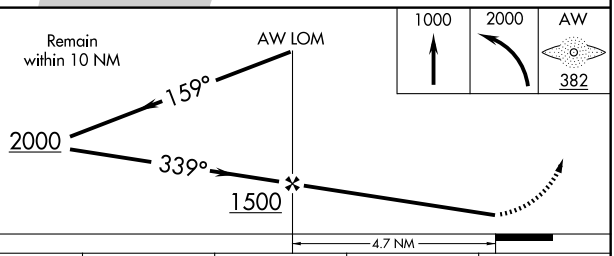
T
NA
Inoperative table does not apply to Cat C.
Use Arlington altimeter setting, if not received use Whidbey Island NAS altimeter setting and increase all MDAs 100 feet.

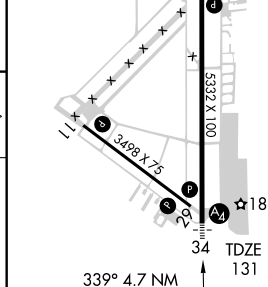
MALS

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct AW LOM and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.625	128.5 306.9	122.7 (CTAF) L







MIRL Rwy 16-34
REIL Rwys 11, 16, and 29

CATEGORY	A	B	C	D
S-34	600-¾ 469 (500-¾)		600-1¼ 469 (500-1¼)	600-1½ 469 (500-1½)
CIRCLING	800-1 663 (700-1)	860-1 723 (800-1)	860-2 723 (800-2)	920-2½ 783 (800-2½)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM AW	APP CRS	Rwy Idg	5332
382	339°	TDZE	131
		Apt Elev	137

NDB or GPS RWY 34

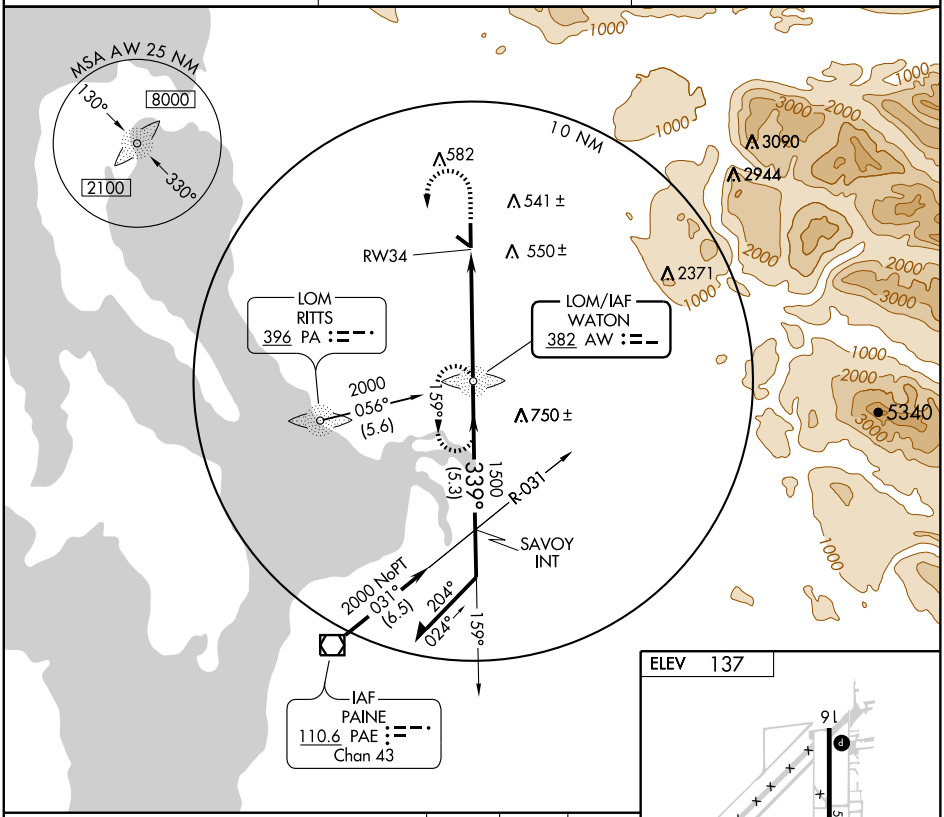
ARLINGTON MUNI (AWO)

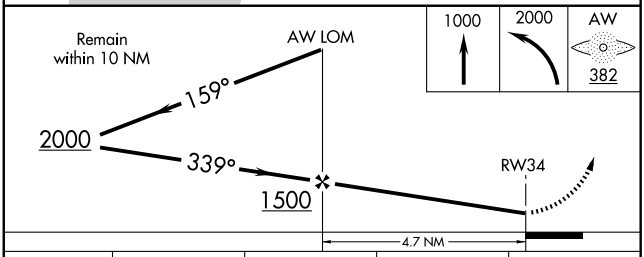
T A Inoperative table does not apply to Cat C. Use Arlington altimeter setting, if not received use Whidbey Island NAS altimeter setting and increase all MDAs 100 feet.

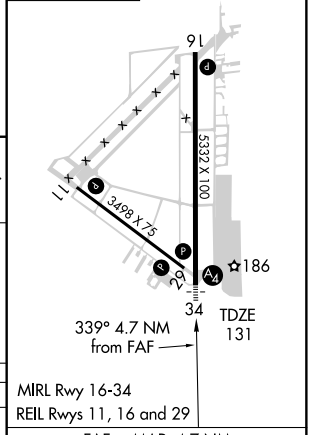
MALS

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct AW LOM and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.625	128.5 306.9	122.7 (CTAF) L







MIRL Rwy 16-34
REIL Rwys 11, 16 and 29

CATEGORY	A	B	C	D
S-34	860-¾	729 (800-¾)	860-2 729 (800-2)	860-2¼ 729 (800-2¼)
CIRCLING	860-1	723 (800-1)	860-2 723 (800-2)	920-2½ 783 (800-2½)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

NW-1, 14 JAN 2010 to 11 FEB 2010

AUBURN ONE DEPARTURE (OBSTACLE)

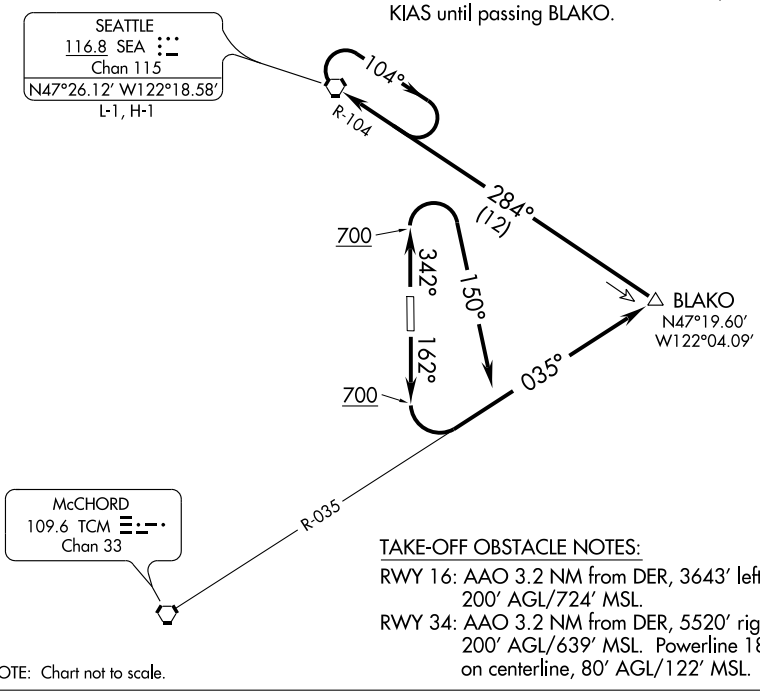
SL-10224 (FAA)

SEATTLE CLNC DEL
128.0
SEATTLE DEP CON
123.85

TAKE-OFF MINIMUMS

RWY 16: Standard with minimum climb of 266′ per NM to 1200 or 1200-2½ for climb in visual conditions, do not exceed 180 KIAS until passing BLAKO.

RWY 34: Standard with minimum climb of 300′ per NM to 900 or 1200-2½ for climb in visual conditions, do not exceed 180 KIAS until passing BLAKO.



TAKE-OFF OBSTACLE NOTES:

RWY 16: AAO 3.2 NM from DER, 3643′ left of centerline 200′ AGL/724′ MSL.

RWY 34: AAO 3.2 NM from DER, 5520′ right of centerline 200′ AGL/639′ MSL. Powerline 1804′ from DER, on centerline, 80′ AGL/122′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 162° to 700, then climbing left turn to 3000 via the TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC; or climb in visual conditions east of RWY 16/34 to cross Auburn Muni southbound at or above 1200′, then climb to 3000 via heading 150° and TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC. Do not exceed 180 KIAS until passing BLAKO. Thence....

TAKE-OFF RUNWAY 34: Climb heading 342° to 700, then climbing right turn to 3000 via heading 150° to TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC; or climb in visual conditions east of RWY 16/34 to cross Auburn Muni southbound at or above 1200′, then climb to 3000 via heading 150° and TCM R-035 to BLAKO INT then left turn via the SEA R-104 to SEA VORTAC. Do not exceed 180 KIAS until passing BLAKO. Thence....

....hold E SEA VORTAC, RT, 284° inbound; when authorized by ATC, climb-in-hold to 5000, or as assigned before proceeding on course.

AUBURN, WASHINGTON

AL-10224 (FAA)

APP CRS	Rwy Idg	
331°	TDZE	N/A
	Apt Elev	63

RNAV (GPS)-A

AUBURN MUNI (S50)

Circling NA west of Rwy 16-34.
Procedure NA at night.
DME/DME RNP- 0.3 NA.
Use Seattle-Tacoma Intl altimeter setting.

NA

MISSED APPROACH: Climbing right turn to 6000 direct ORTIN and hold, continue climb-in-hold to 6000.

SEATTLE APP CON	UNICOM
123.85	122.8 (CTAF)

Procedure NA for arrivals at CIDUG via V495 southbound.

584

723 ±

(MAP) UGUYE

562

266

270

955

690

662

853

(FAF) WISBA

2100

331°

(6.1)

5 NM

090°

010°

(IF/IAF) ORTIN

151°

331°

5 NM

4000 NoPT

033°

(11.2)

(IAF) CIDUG

RADAR REQUIRED

MSA UGUYE 25 NM

7900

1500

1280

3570

3921

3981

1801

5941

2440

1000

2000

3000

4000

ELEV 63

91

3400 X 75

34

6000

ORTIN

VGSI and descent angle not coincident.

ORTIN

5 NM Holding Pattern

WISBA

151°

4000

331°

UGUYE

3.12°

TCH 53

331°

2100

0.5

5.5 NM

6.1 NM

CATEGORY	A	B	C	D
CIRCLING	1320-1¼ 1257 (1300-1¼)	1320-1½ 1257 (1300-1½)	NA	

MIRL Rwy 16-34
REIL Rwys 16 and 34

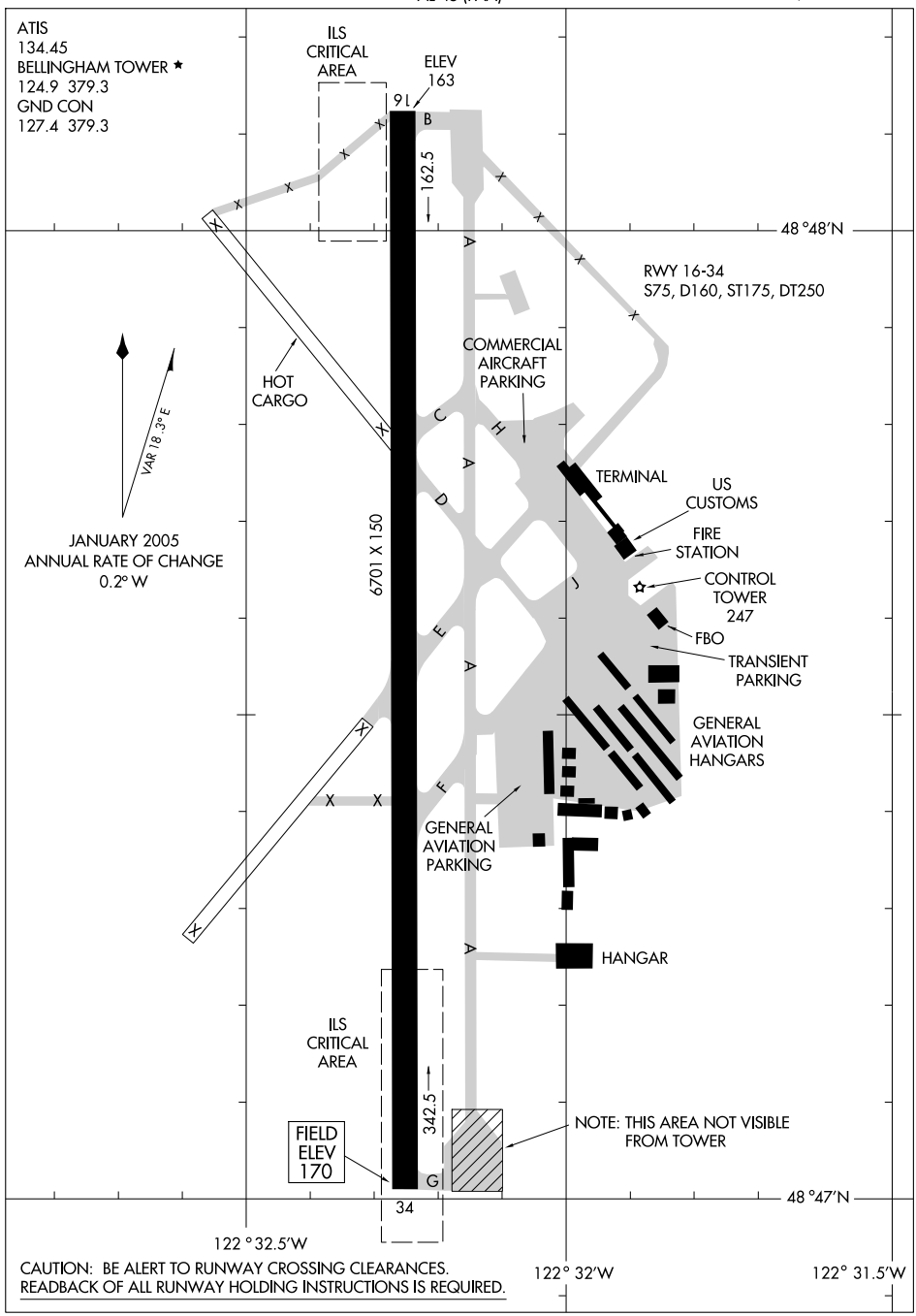
NW-1, 14 JAN 2010 to 11 FEB 2010

09127

AIRPORT DIAGRAM

AL-45 (FAA)

BELLINGHAM INTL (BLI)
BELLINGHAM, WASHINGTON



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BLI	APP CRS	Rwy Idg	6701
108.5	160°	TDZE	163
Chan 22		Apt Elev	170

ILS or LOC RWY 16

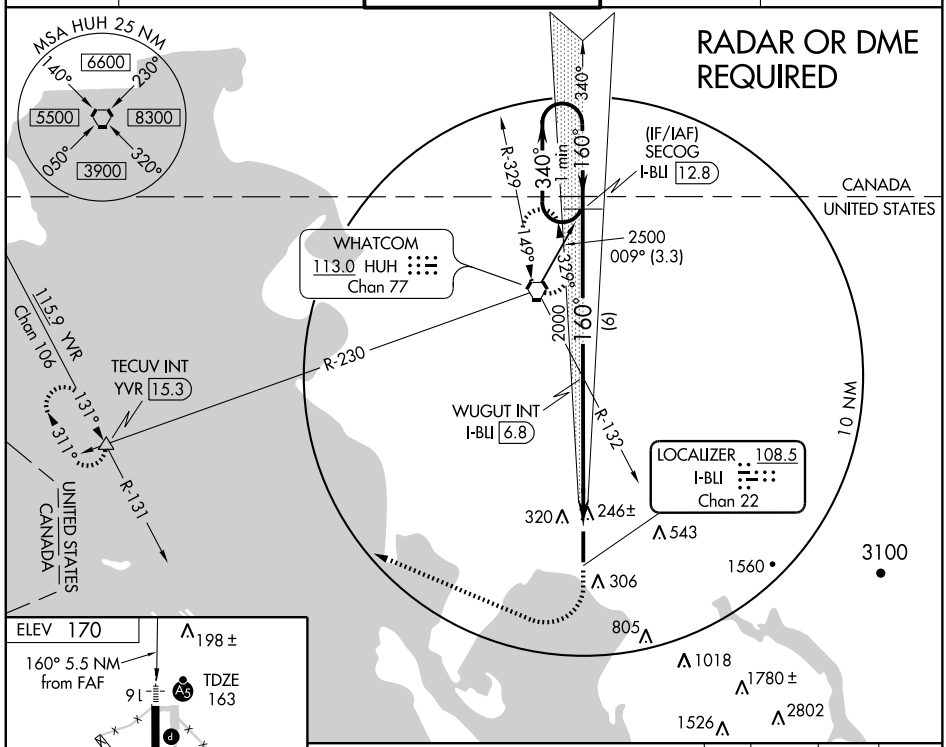
BELLINGHAM INTL (BLI)

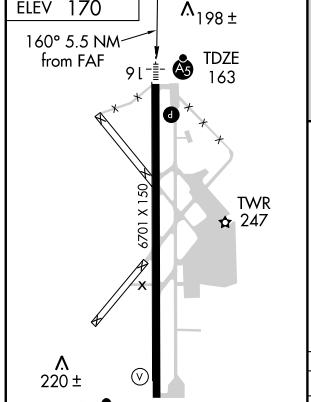
For inoperative MALSR, increase S-LOC 16 Cat D visibility to RVR 5000.
If local altimeter not received, use Friday Harbor altimeter setting and increase DA to 430 and increase all MDAs 80 feet.
VDP NA when using Friday Harbor altimeter setting.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 via heading 271° and YVR VORTAC R-131 to TECUV INT/YVR 15.3 DME and hold.

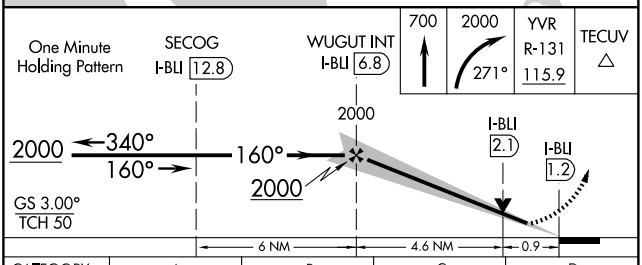
ATIS	VICTORIA TERMINAL APP CON	BELLINGHAM TOWER *	GND CON	UNICOM
134.45	132.7 290.8	124.9 (CTAF) L 379.3	127.4 379.3	122.95





FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



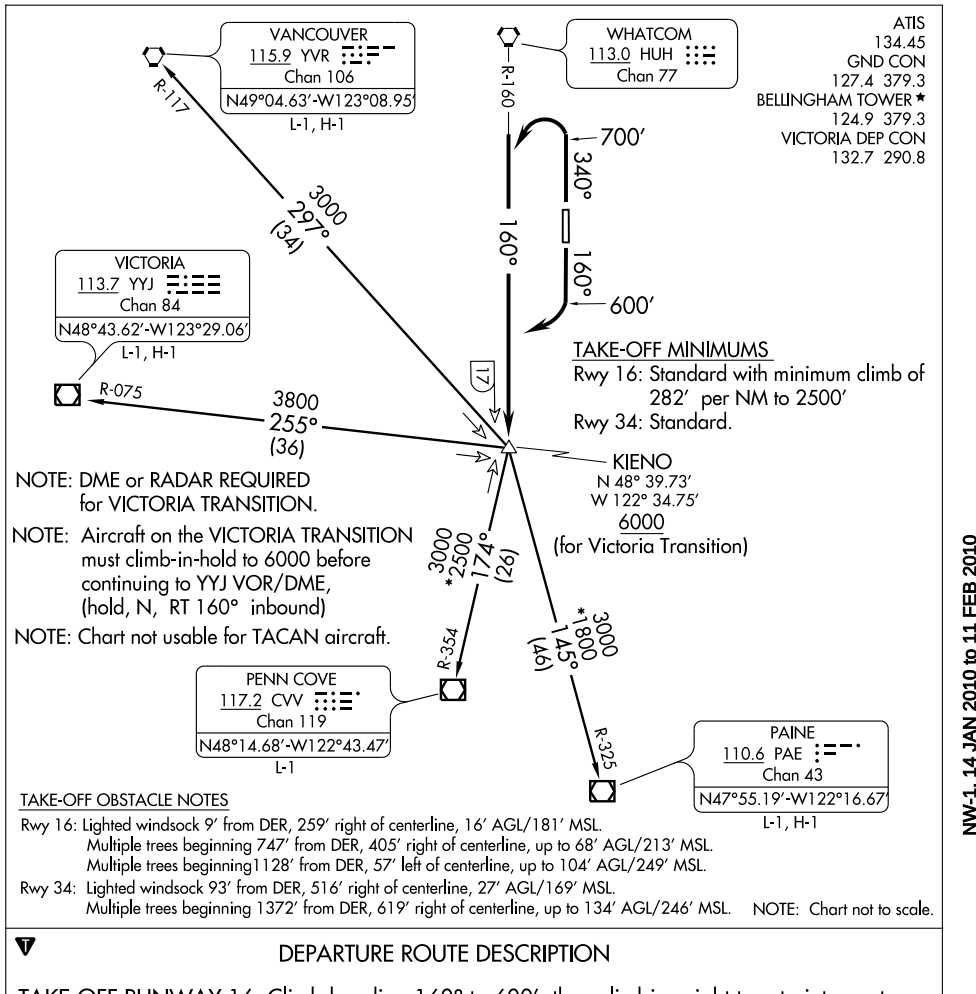
CATEGORY	A	B	C	D
S-ILS 16	* 363/24 200 (200-½)			
S-LOC 16	500/24 337 (400-½)			500/40 337 (400-¾)
CIRCLING	620-1 450 (500-1)		620-1½ 450 (500-1½)	720-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

KIENO TWO DEPARTURE

SL-45 (FAA)

BELLINGHAM INTL (BLI)
BELLINGHAM, WASHINGTON



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 160° to 600', then climbing right turn to intercept HUH R-160 to KIENO INT, Thence....
TAKE-OFF RUNWAY 34: Climb heading 340° to 700', then climbing left turn to intercept HUH R-160 to KIENO INT. Thence....

....Maintain 3000 via assigned transition, expect requested altitude within 10 minutes.

PAINE TRANSITION (KIENO2.PAE): From over KIENO INT via PAE R-325 to PAE VOR/DME.
PENN COVE TRANSITION (KIENO2.CVV): From over KIENO INT via CVV R-354 to CVV VOR/DME.
VANCOUVER TRANSITION (KIENO2.YVR): From over KIENO INT via YVR R-117 to YVR VORTAC.
VICTORIA TRANSITION (KIENO2.YYJ): From over KIENO INT via YYJ R-075 to YYJ VOR/DME.

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 45999 W16A	APP CRS 160°	Rwy Idg 6701 TDZE 163 Apt Elev 170

RNAV (GPS) RWY 16

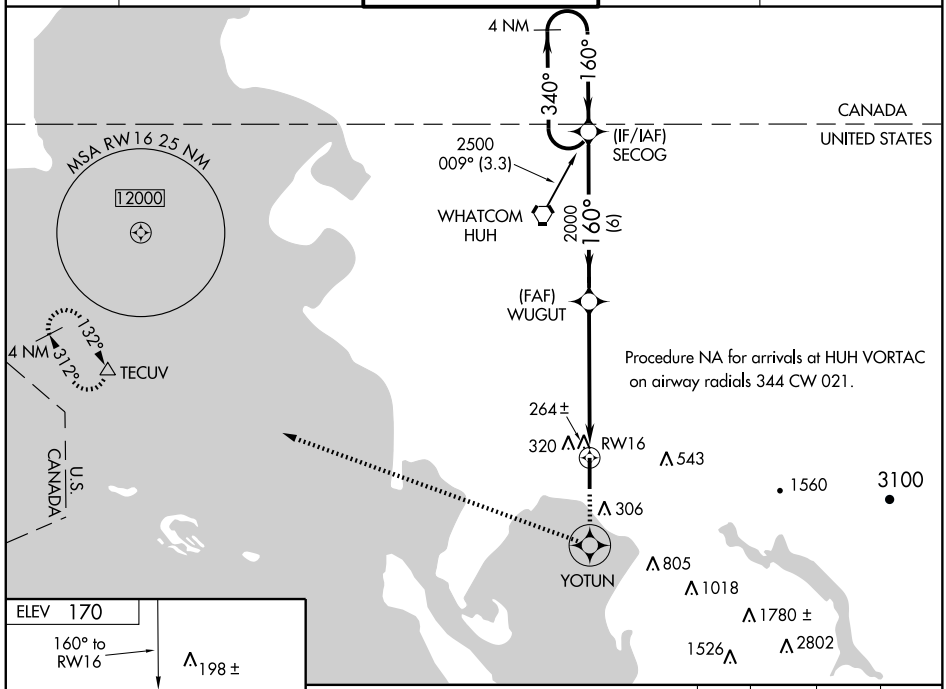
BELLINGHAM INTL (BLI)

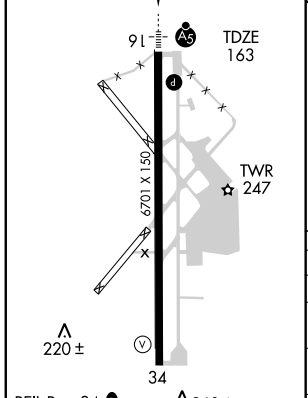
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000. Increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.
Baro-VNAV and VDP NA when using Friday Harbor altimeter setting. If local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDAs 80 feet.

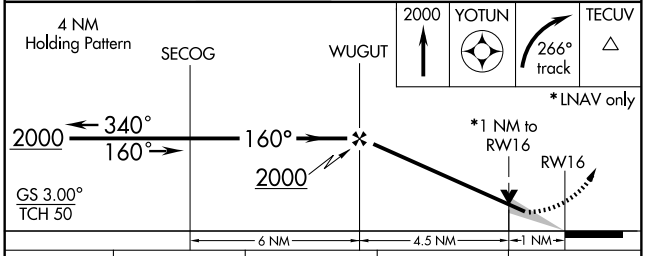
MALSR

MISSED APPROACH: Climb to 2000 direct YOTUN and right turn via 266° track to TECUV and hold.

ATIS	VICTORIA TERMINAL APP CON	BELLINGHAM TOWER*	GND CON	UNICOM
134.45	132.7 290.8	124.9 (CTAF) L 379.3	127.4 379.3	122.95







CATEGORY	A	B	C	D
LPV DA	442/24 279 (300-½)			
LNAV/VNAV DA	554/40 391 (400-¾)			
LNAV MDA	520/24 357 (400-½)			520/50 357 (400-1)
CIRCLING	620-1 450 (500-1)		620-1½ 450 (500-1½)	720-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86223 W34A	APP CRS 340°	Rwy Idg 6701 TDZE 170 Apt Elev 170

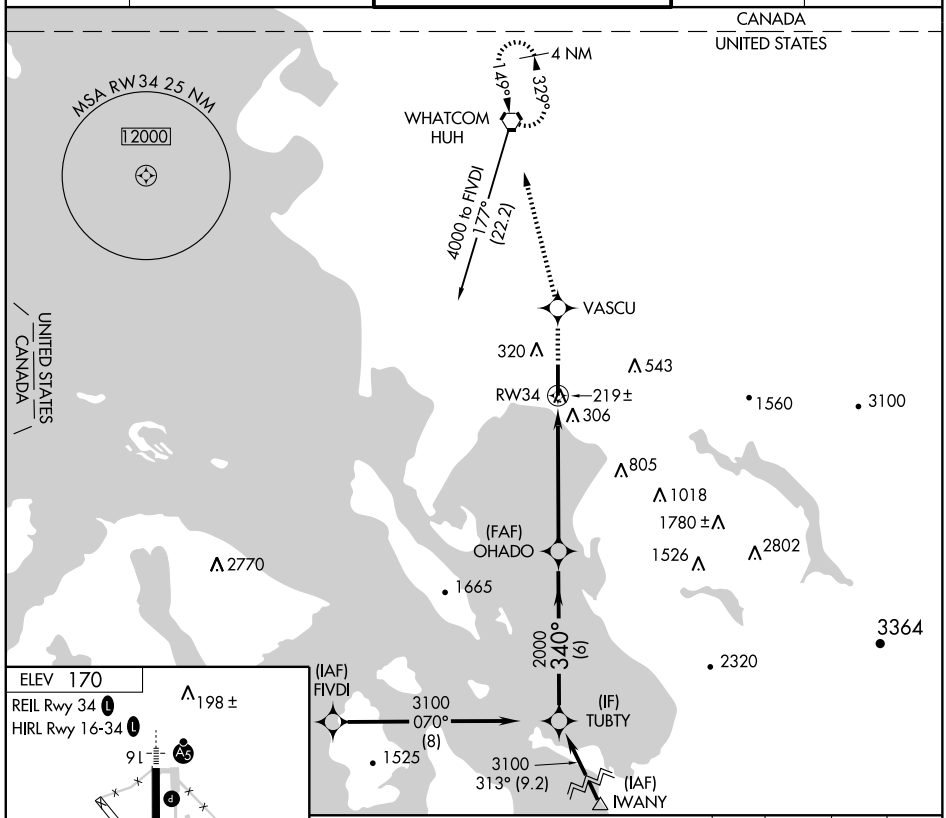
RNAV (GPS) RWY 34

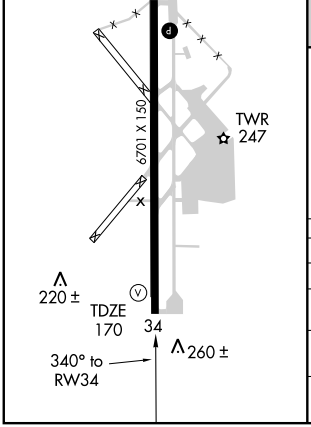
BELLINGHAM INTL (BLI)

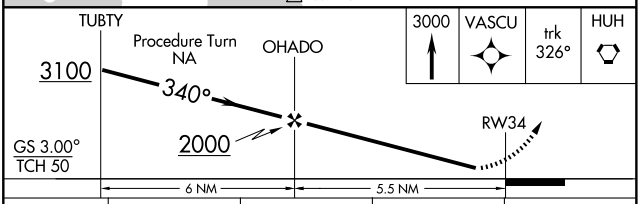
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).

MISSED APPROACH: Climb to 3000 direct VASCU and via 326° track to HUH VORTAC and hold, continue climb-in-hold to 3000.

ATIS	VICTORIA TERMINAL APP CON	BELLINGHAM TOWER*	GND CON	UNICOM
134.45	132.7 290.8	124.9 (CTAF) L 379.3	127.4 379.3	122.95







CATEGORY	A	B	C	D
LPV DA	439-1 269 (300-1)			
LNAV/ VNAV DA	592-1½ 422 (500-1½)			
LNAV MDA	560-1 390 (400-1)			560-1¼ 390 (400-1¼)
CIRCLING	620-1 450 (500-1)		620-1½ 450 (500-1½)	720-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-PWT	APP CRS	Rwy Idg	6000
111.1	193°	TDZE	441
		Apt Elev	444

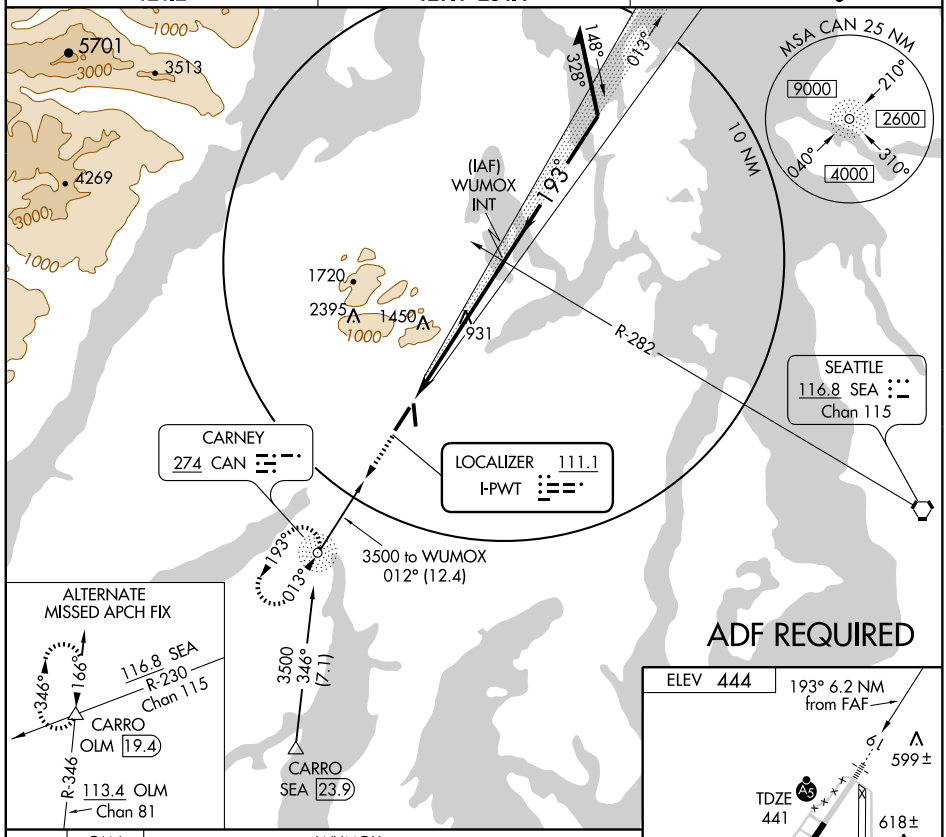
ILS or LOC RWY 19
BREMERTON NATIONAL (PWT)

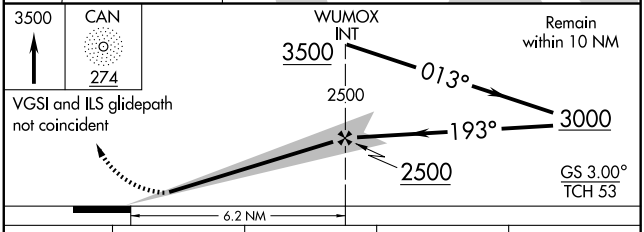
Circling NA for Cat. D west of Rwy 1-19. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all DA/MDAs 60 feet and all visibilities 3/4 mile, inoperative table does not apply.

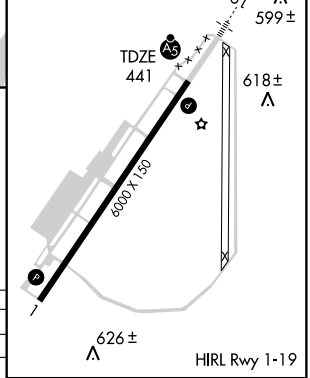
MALSR

MISSED APPROACH: Climb to 3500 direct CAN NDB and hold, continue climb-in-hold to 3500.

AWOS-3	SEATTLE APP CON	UNICOM
121.2	127.1 254.4	123.05 (CTAF)







CATEGORY	A	B	C	D
S-ILS 19	645-½ 204 (300-½)			
S-LOC 19	1200-½ 759 (800-½)	1200-¾ 759 (800-¾)	1200-1¾ 759 (800-1¾)	1200-2 759 (800-2)
CIRCLING	1200-1 756 (800-1)	1200-1¼ 756 (800-1¼)	1200-2¼ 756 (800-2¼)	1200-2½ 756 (800-2½)

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB PWT 206	APP CRS 020°	Rwy Idg 6000 TDZE 439 Apt Elev 439

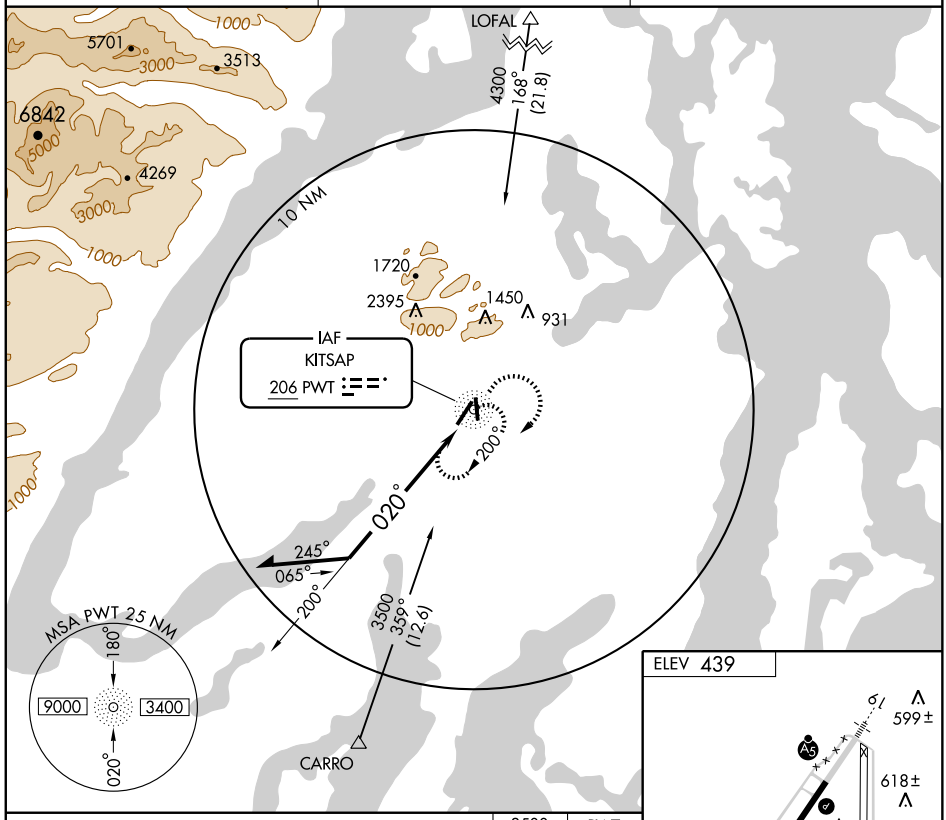
NDB RWY 1
BREMERTON NATIONAL (PWT)

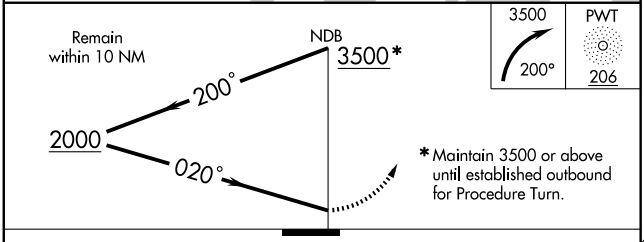
T
A NA

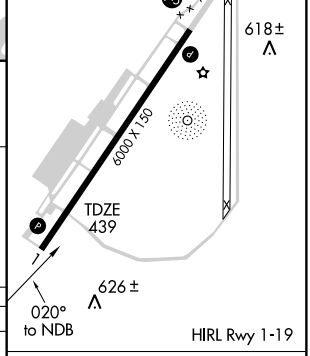
Circling NA west of Rwy 1-19 for Cat.D.

MISSED APPROACH: Climbing right turn to 3500 via 200° bearing from PWT NDB, then direct PWT NDB and hold.

AWOS-3	SEATTLE APP CON	UNICOM
121.2	127.1 254.4	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-1	980-1	541 (600-1)	980-1½ 541 (600-1½)	980-1¾ 541 (600-1¾)
CIRCLING	980-1	541 (600-1)	980-1½ 541 (600-1½)	1000-2 561 (600-2)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6000
013°	TDZE	444
	Apt Elev	444

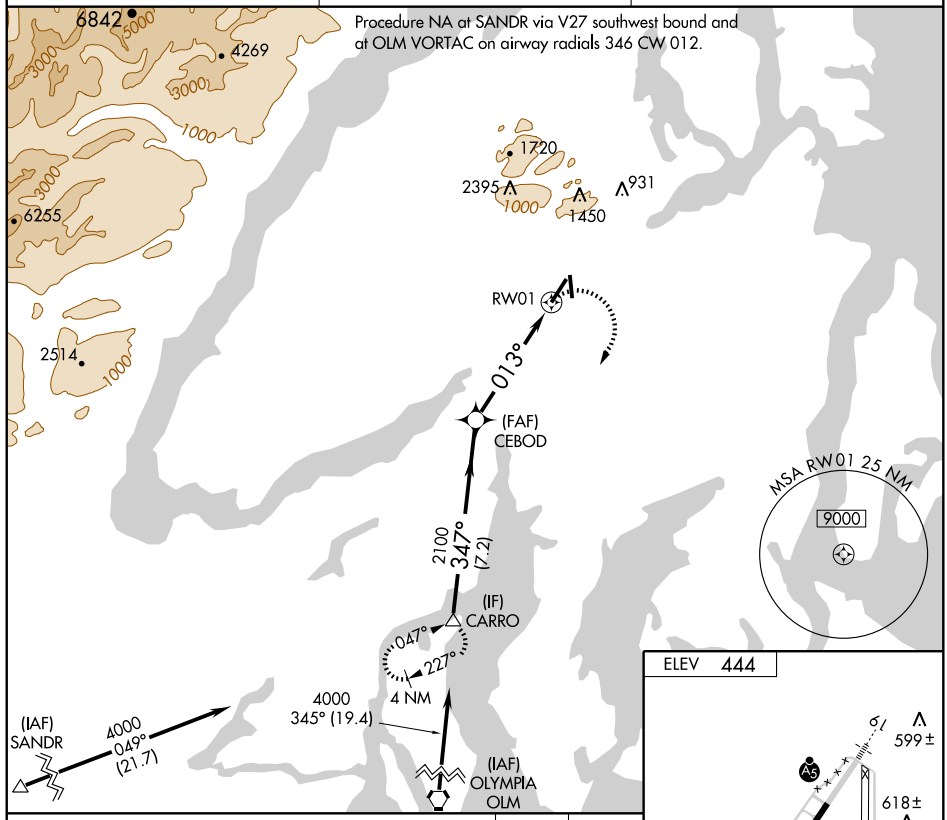
RNAV (GPS) RWY 1
BREMERTON NATIONAL (PWT)

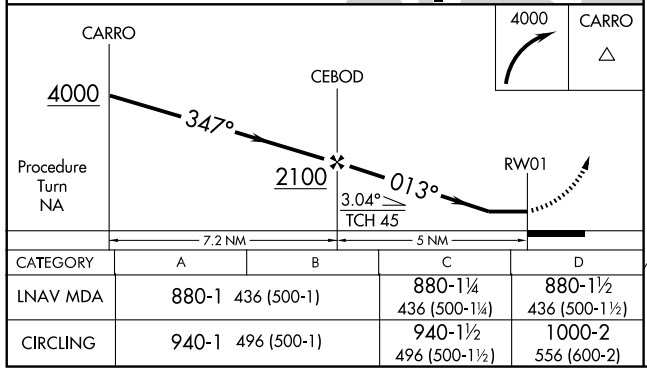
Circling NA for Cat. D west of Rwy 1-19.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all MDAs 60 feet.

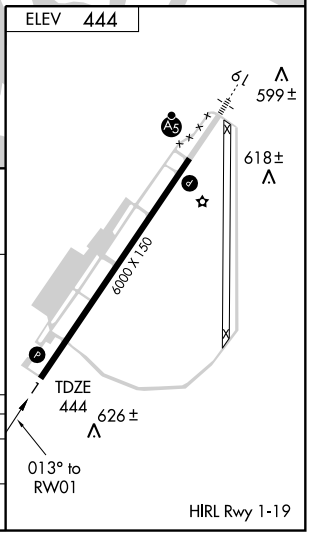
MISSED APPROACH: Climbing right turn to 4000 direct CARRO and hold, continue climb-in-hold to 4000.

AWOS-3	SEATTLE APP CON	UNICOM
121.2	127.1 254.4	123.05 (CTAF)

Procedure NA at SANDR via V27 southwest bound and at OLM VORTAC on airway radials 346 CW 012.







CATEGORY	A	B	C	D
LNAV MDA	880-1 436 (500-1)		880-1¼ 436 (500-1¼)	880-1½ 436 (500-1½)
CIRCLING	940-1 496 (500-1)		940-1½ 496 (500-1½)	1000-2 556 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	6000
CH 61106	193°	TDZE	441
W19A		Apt Elev	444

RNAV (GPS) RWY 19

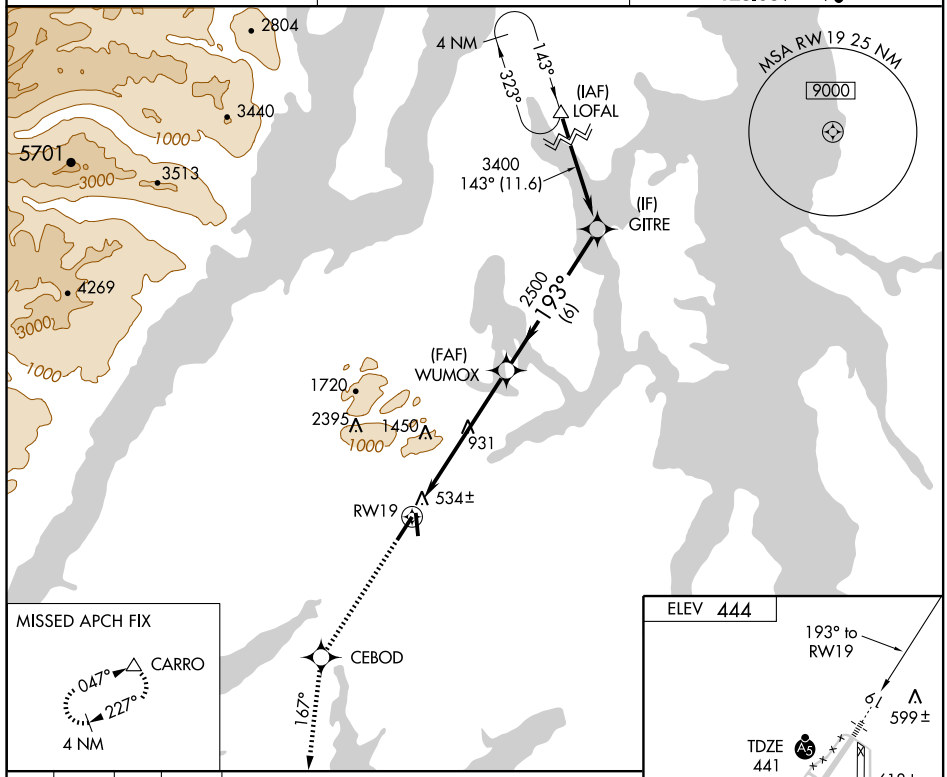
BREMERTON NATIONAL (PWT)

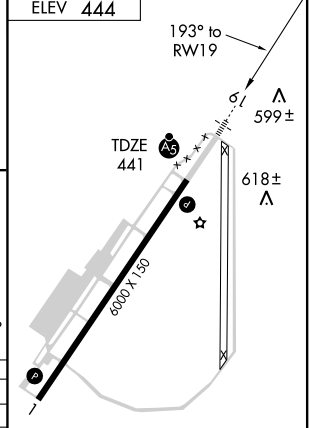
Circling NA for Cat. D west of Rwy 1-19. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase DA to 808 feet and all MDAs 60 feet, increase LPV visibility all Cats. 1/2 mile. Inoperative table does not apply to LNAV Cat. A and B. VDP NA when using Seattle-Tacoma Intl altimeter setting. For inoperative MALSR increase LPV visibility all Cats. 1/2 mile. Inoperative table does not apply to LNAV Cat. A and B.

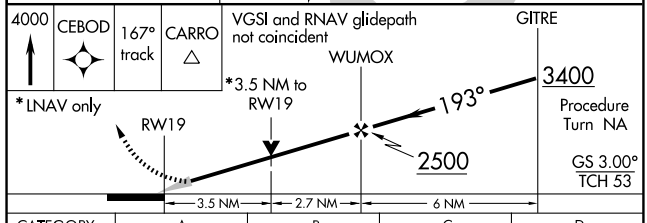
MALSR

MISSED APPROACH: Climb to 4000 direct CEBOD and via 167° track to CARRO and hold, continue climb-in-hold to 4000.

AWOS-3	SEATTLE APP CON	UNICOM
121.2	127.1 254.4	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	763-½ 322 (400-½)			
LNAV MDA	1600-1¼ 1159 (1200-1¼)	1600-1½ 1159 (1200-1½)	1600-2½ 1159 (1200-2½)	
CIRCLING	1600-1¼ 1156 (1200-1¼)	1600-1½ 1156 (1200-1½)	1600-3 1156 (1200-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB BVS 240	APP CRS 112°	Rwy Idg 5477 TDZE 144 Apt Elev 144

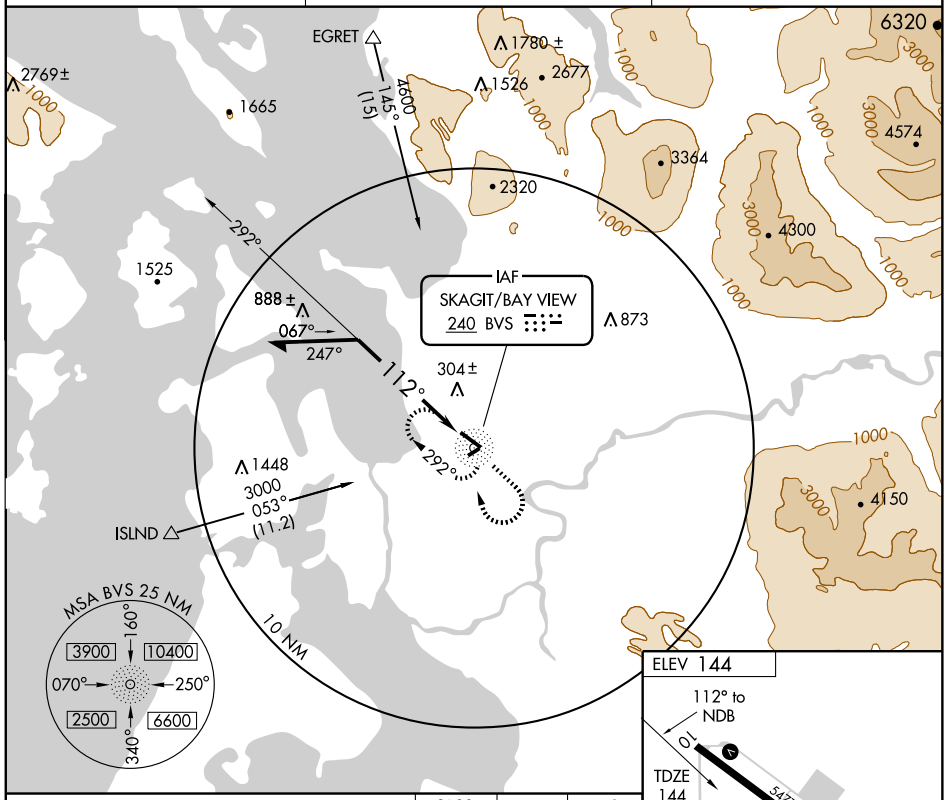
NDB RWY 10

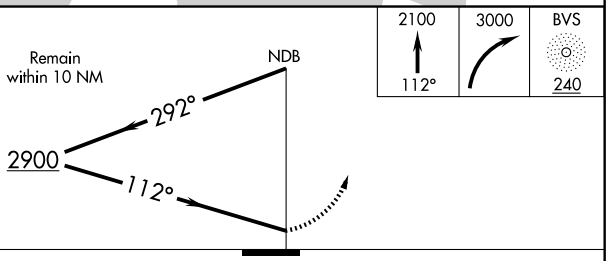
BURLINGTON/MOUNT VERNON/ SKAGIT RGNL (BVS)

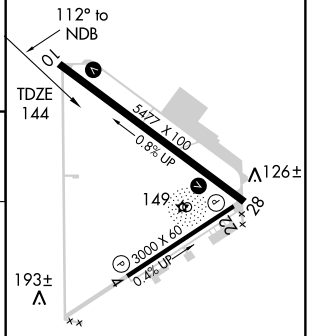
▼ Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 2100 via 112° bearing from BVS NDB then climbing right turn to 3000 direct BVS NDB and hold.

AWOS-3	WHIDBEY APP CON ★	UNICOM
121.125	120.7 270.8	123.075 (CTAF) L







CATEGORY	A	B	C	D
S-10	1400-1¼ 1256 (1300-1¼)	1400-1½ 1256 (1300-1½)	1400-3	1256 (1300-3)
CIRCLING	1400-1¼ 1256 (1300-1¼)	1400-1½ 1256 (1300-1½)	1400-3	1256 (1300-3)

LIRL Rwy 4-22 L
REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5477
CH 53500	105°	TDZE	144
W10A		Apt Elev	144

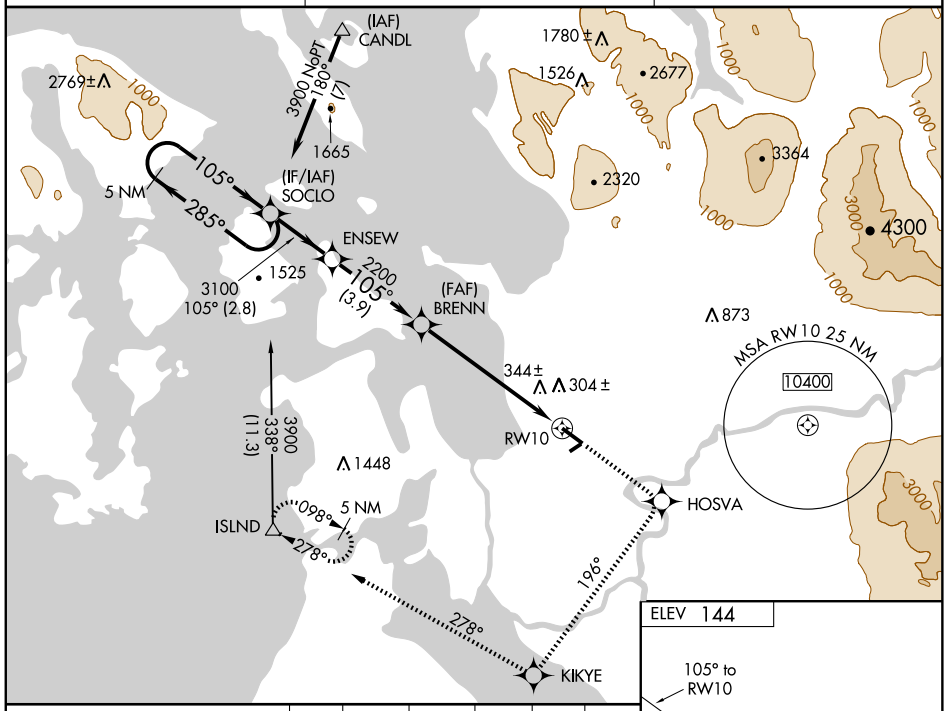
RNAV (GPS) RWY 10

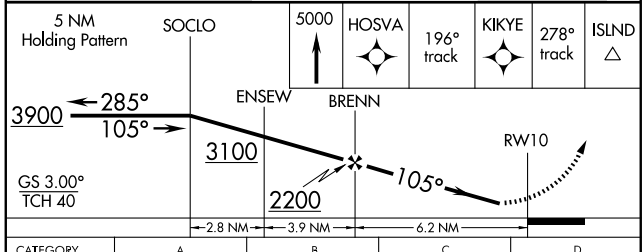
BURLINGTON/MOUNT VERNON/ SKAGIT RGNL (BVS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDA 80 feet, increase LPV and LNAV/VNAV all Cats, LNAV Cats C and D visibilities ¼ mile.

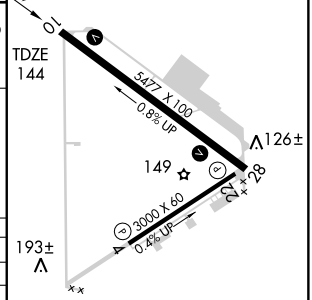
MISSED APPROACH: Climb to 5000 direct HOSVA and via 196° track to KIKYE and via 278° track to ISLND and hold, continue climb-in-hold to 5000.

AWOS-3	WHIDBEY APP CON ★	UNICOM
121.125	120.7 270.8	123.075 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	497-1¼ 353 (400-1¼)			
LNAV/VNAV DA	640-1¾ 496 (500-1¾)			
LNAV MDA	620-1 476 (500-1)		620-1¼ 476 (500-1¼)	620-1½ 476 (500-1½)
CIRCLING	660-1 516 (600-1)		660-1½ 516 (600-1½)	700-2 556 (600-2)



LIRL Rwy 4-22 L
REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

WAAS	APP CRS		
CH 70407	286°	Rwy Idg	5477
W28A		TDZE	126
		Apt Elev	144

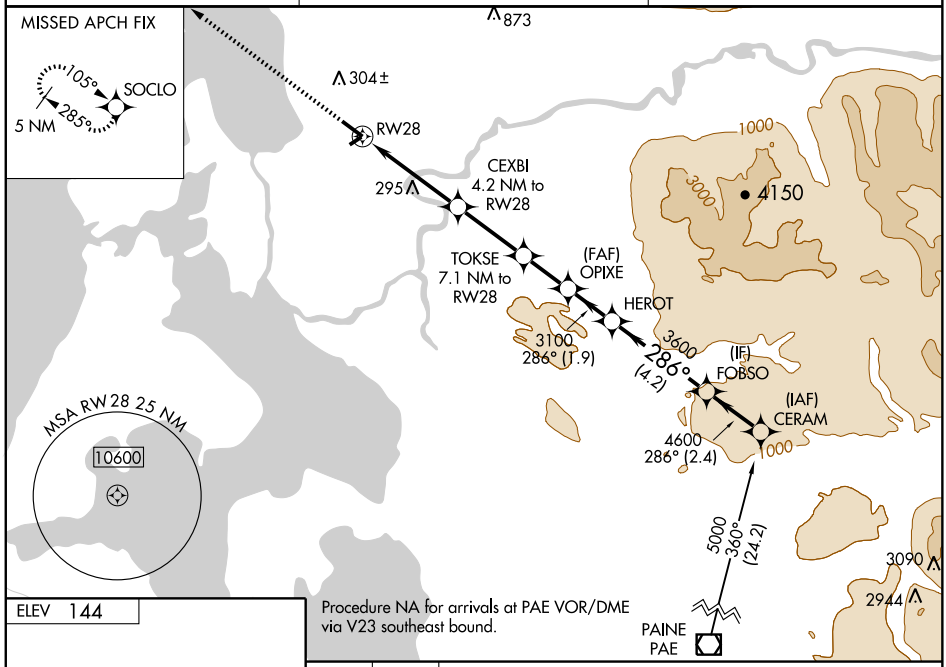
RNAV (GPS) RWY 28

BURLINGTON/MOUNT VERNON/SKAGIT RGNL (BVS)

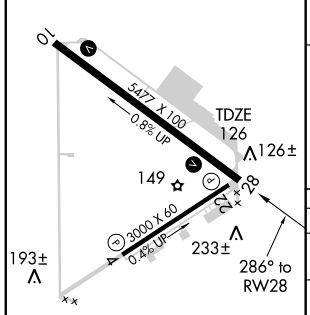
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. VDP and Baro-VNAV NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DA/MDA 80 feet, increase LPV and LNAV/VNAV all Cats, LNAV Cats C and D visibilities ¼ mile.

MISSED APPROACH: Climb to 4000 direct SOCLO and hold, continue climb-in-hold to 4000.

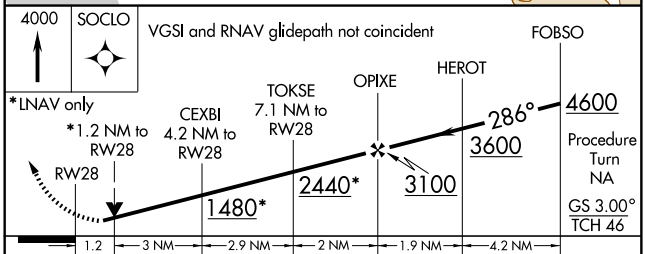
AWOS-3	WHIDBEY APP CON★	UNICOM
121.125	120.7 270.8	123.075 (CTAF) L



ELEV 144



LIRL Rwy 4-22 L
REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L



CATEGORY	A	B	C	D
LPV DA	421-1¼ 295 (300-1¼)			
LNAV/VNAV DA	503-1½ 377 (400-1½)			
LNAV MDA	600-1 474 (500-1)		600-1¼ 474 (500-1¼)	600-1½ 474 (500-1½)
CIRCLING	660-1 516 (600-1)		660-1½ 516 (600-1½)	700-2 556 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5000
160°	TDZE	173
	Apt Elev	174

RNAV (GPS) RWY 16
CHEHALIS-CENTRALIA (CLS)

DME/DME RNP- 0.3 NA.
NA Circling NA northeast of Rwy 16-34.
Circling NA at night.

MISSED APPROACH: Climb to 5000 direct JIVUT and right turn via 250° track to CETUV and hold, continue climb-in-hold to 5000.

AWOS-3	SEATTLE APP CON	UNICOM
118.025	121.1 391.9	122.8 (CTAF) L

2356
2952 ±
(IAF) DOCRA
4000 NoPT 100° (9.2)
4 NM
160°
340°
(IAF) OLYMPIA OLM
4000 NoPT 202° (6)
RAINER 1 MOA
R-6703
RAINER 2 MOA
Procedure NA for arrival on OLM VORTAC airway radials 151 CW 201.
4000 NoPT 257° (7.9)
(IF/IAF) RELTE
(IAF) ECEKO
4200 258° (10)
MCKEN
1683 ±
160° (7.2)
2000
MSA RW16 25 NM
5600
(FAF) NOYID
819 ±
679 ±
543
2487
2833
365
RW16
840
679
804
968 ±
JIVUT
CETUV
021°
201°
5 NM
1681
1640

4 NM Holding Pattern
RELTE
340°
160°
4000
160°
NOYID
3.05°
TCH 51
RW16
2000
VGSI and descent angles not coincident.
7.2 NM
5.5 NM

5000 JIVUT 250° CETUV

ELEV 174
160° to RW16
TDZE 173
9L
5000 X 150
34
REIL Rwy 16-34 L
MIRL Rwy 16-34 L

CATEGORY	A	B	C	D
LNAV MDA	980-1 807 (900-1)	980-1¼ 807 (900-1¼)	980-2¼ 807 (900-2¼)	980-2½ 807 (900-2½)
CIRCLING	980-1 806 (900-1)	980-1¼ 806 (900-1¼)	1080-2¾ 906 (1000-2¾)	1140-3 966 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

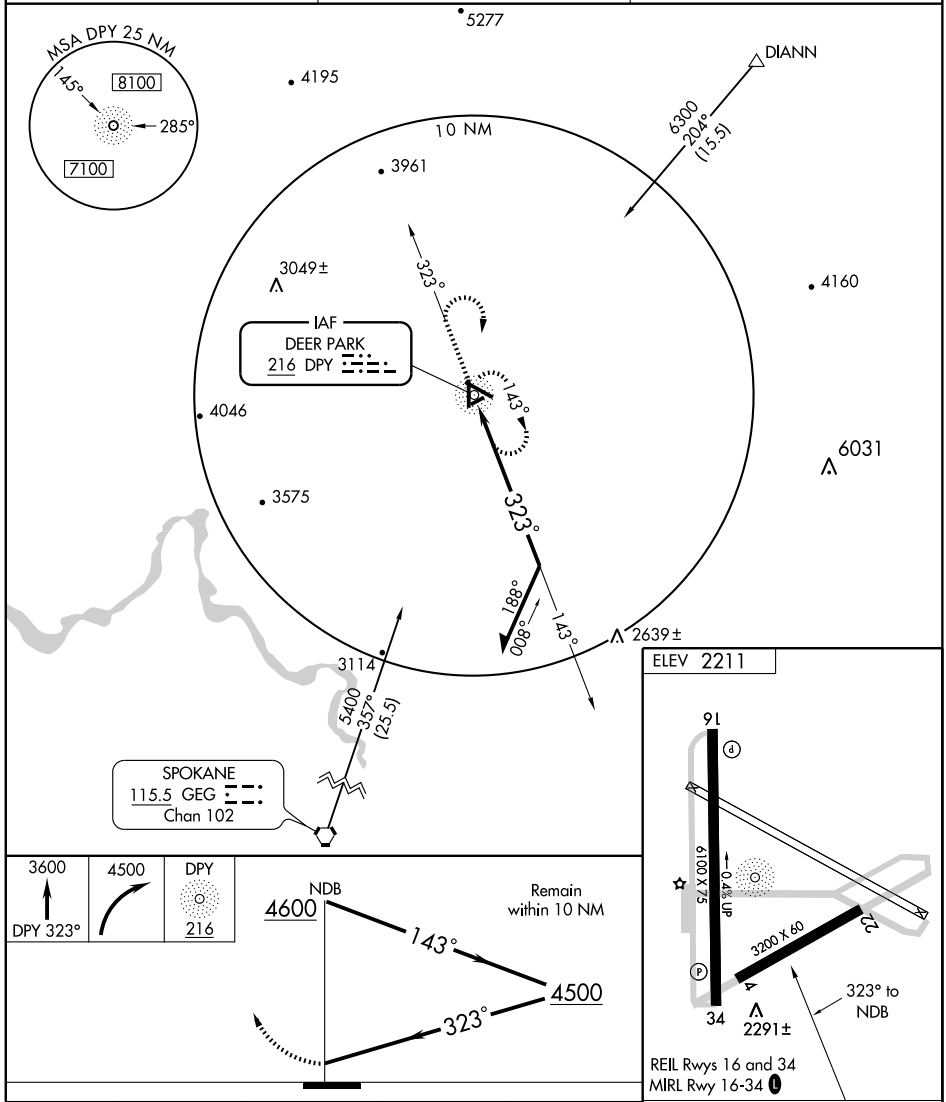
NDB DPY 216	APP CRS 323°	Rwy Idg N/A TDZE N/A Apt Elev 2211

NDB-A
DEER PARK (DEW)

Circling NA west of Rwy 16-34.
When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDAs 80 feet and all visibilities ¼ mile.

MISSED APPROACH: Climb to 3600 via 323° bearing from DPY NDB then climbing right turn to 4500 direct DPY NDB and hold.

ASOS	SPOKANE APP CON	UNICOM
135.175	123.75 282.25	123.0 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	3000-1 789 (800-1)	3000-1¼ 789 (800-1¼)	3000-2¼ 789 (800-2¼)	3000-2½ 789 (800-2½)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

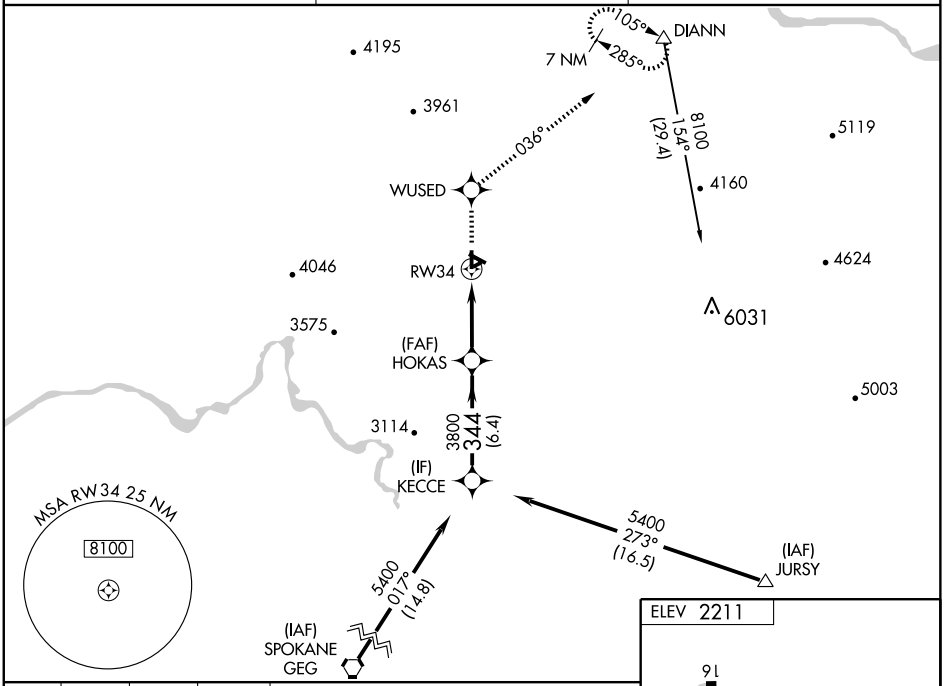
WAAS CH 61306 W34A	APP CRS 344°	Rwy Idg 6100 TDZE 2201 Apt Elev 2211

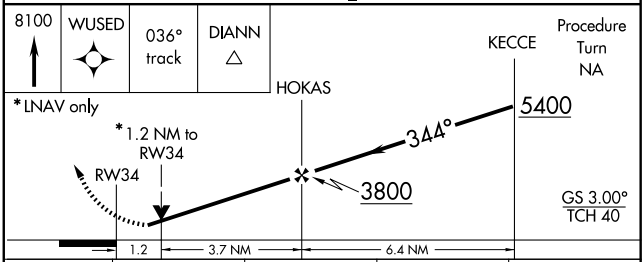
RNAV (GPS) RWY 34
DEER PARK (DEW)

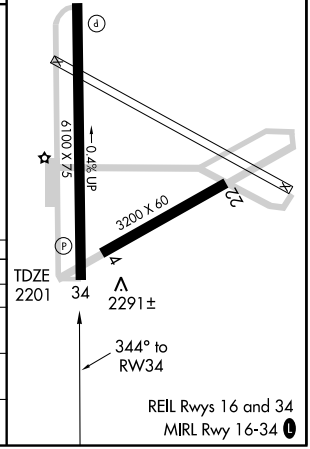
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).
When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDAs 80 feet and all visibilities ¼ mile.
Circling not authorized west of Rwy 16-34. DME/DME RNP- 0.3 NA.
VDP and Baro-VNAV NA when using Spokane Intl altimeter setting.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 8100 direct WUSED and via 036° track to DIANN and hold, continue climb-in- hold to 8100.

ASOS	SPOKANE APP CON	UNICOM
135.175	123.75 282.25	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2466-1 265 (300-1)			
LNAV/VNAV DA	2551-1¼ 350 (400-1¼)			
LNAV MDA	2600-1 399 (400-1)			2600-1¼ 399 (400-1¼)
CIRCLING	2700-1 489 (500-1)		2700-1½ 489 (500-1½)	2780-2 569 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	NA
343°	TDZE	NA
	Apt Elev	31

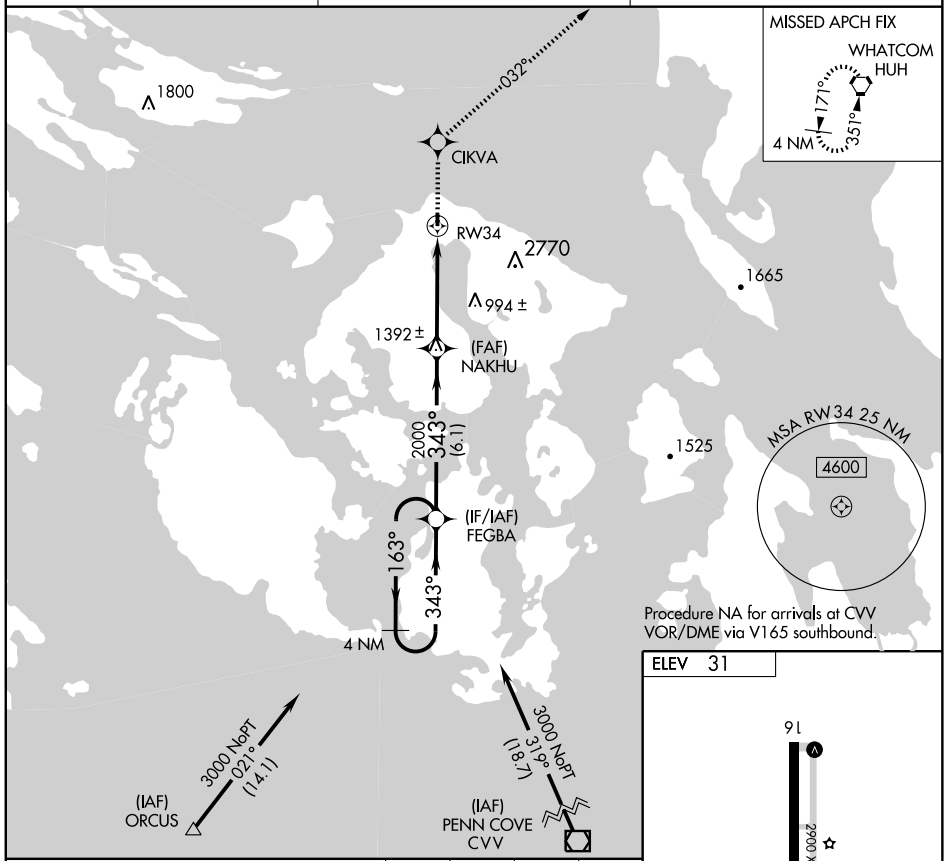
RNAV (GPS)-A

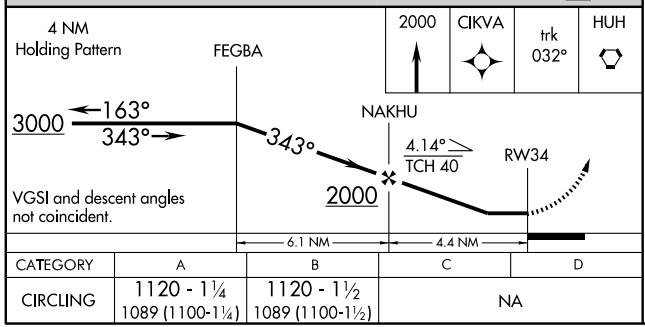
EASTSOUND/ORCAS ISLAND (ORS)

DME/DME RNP- 0.3 NA. Procedure NA at night.
When local altimeter setting not received, use Friday Harbor altimeter setting and increase MDA 40 feet.

MISSED APPROACH: Climb To 2000 direct CIKVA and via track 032° to HUH VORTAC and hold.

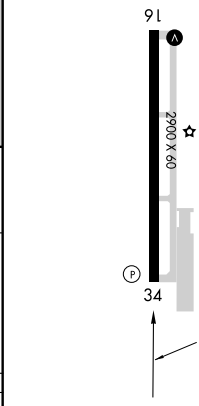
AWOS-3	WIDBEY APP CON	CTAF
135.425	118.2 285.65	128.25 (L)





CATEGORY	A	B	C	D
CIRCLING	1120 - 1¼ 1089 (1100-1¼)	1120 - 1½ 1089 (1100-1½)	NA	

ELEV 31



MIRL Rwy 16-34
REIL Rwys 16 and 34 (L)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5590
267°	TDZE	1755
	Apt Elev	1764

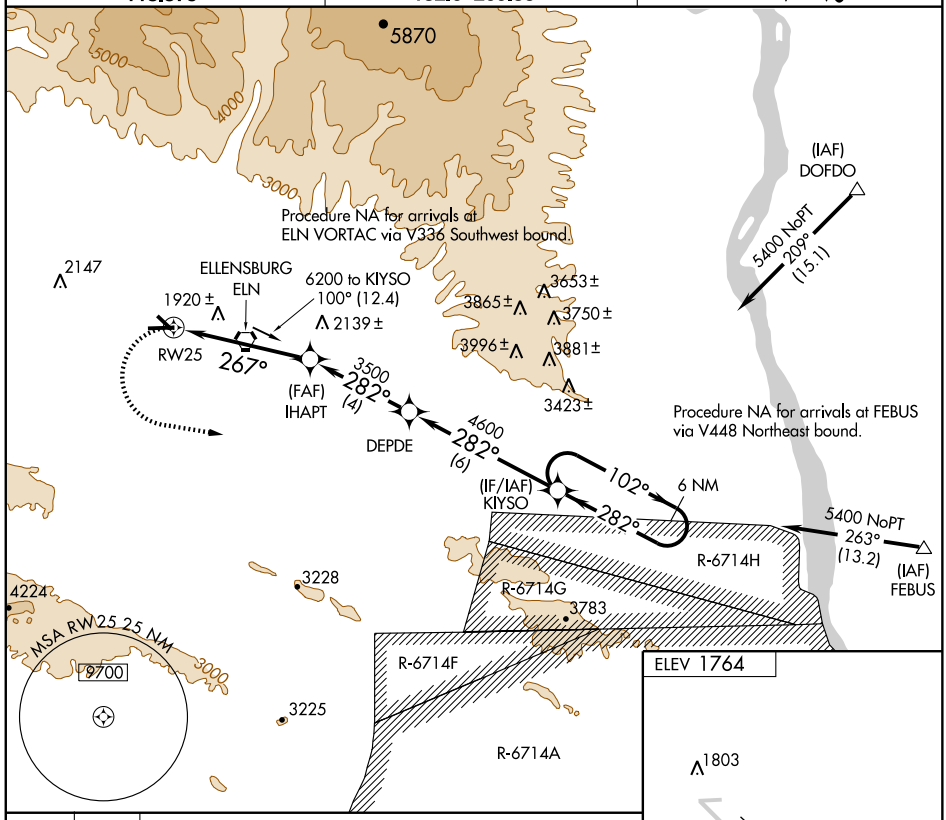
RNAV (GPS) RWY 25

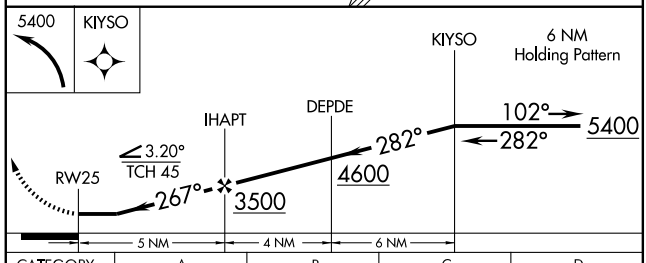
ELLENSBURG/ BOWERS FIELD (ELN)

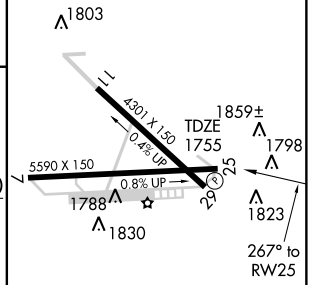
Straight-in minimums not authorized at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Procedure not authorized when R-6714A, F, G, H are in operation. When local altimeter setting not received, use Wenatchee altimeter setting and increase all MDA 140 feet and increase visibility LNAV Cat. B ¼ mile, Cats. C/D ½ mile, and increase circling visibility Cat. B ¼ mile, Cats. C/D ½ mile.

MISSED APPROACH: Climbing left turn to 5400 direct KIYSO and hold.

ASOS	SEATTLE CENTER	UNICOM
118.375	132.6 269.35	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2360-1 605 (600-1)		2360-1¾ 605 (600-1¾)	2360-2 605 (600-2)
CIRCLING	2360-1 596 (600-1)		2360-1¾ 596 (600-1¾)	2500-2¼ 736 (800-2¼)

REIL Rwy 29
MIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4301
297°	TDZE	1759
	Apt Elev	1764

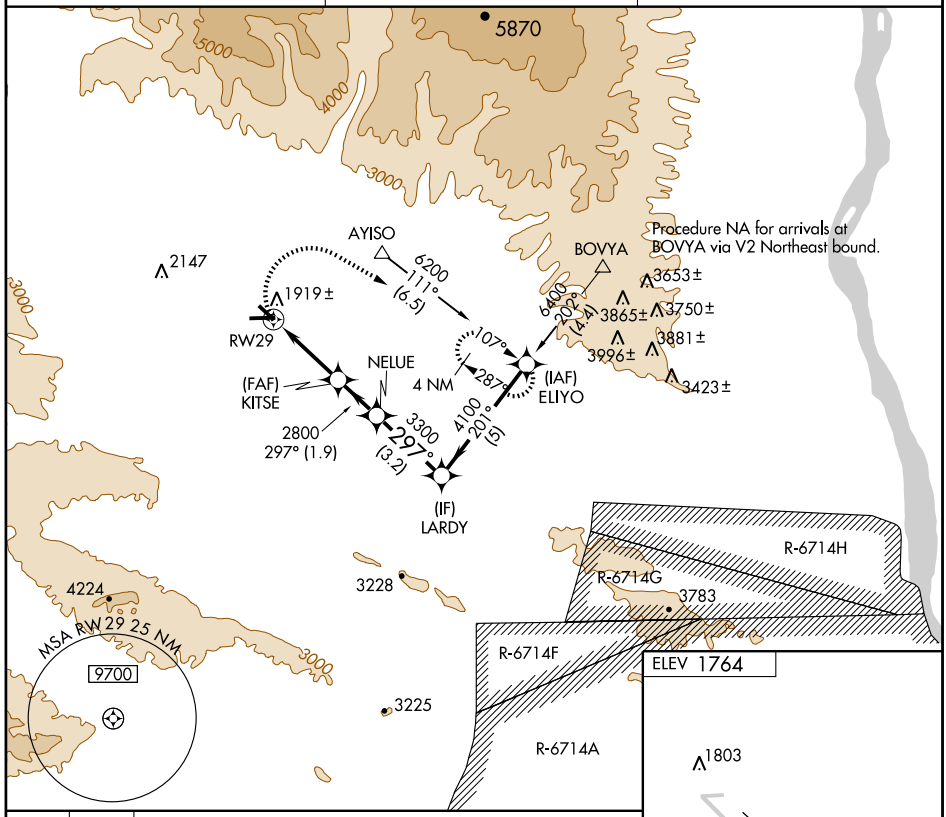
RNAV (GPS) RWY 29

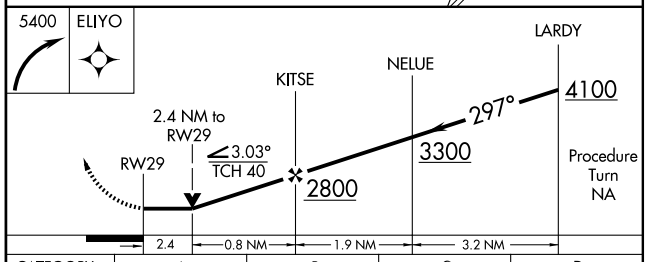
ELLENSBURG/ BOWERS FIELD (ELN)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Wenatchee altimeter setting and increase all MDA 140 feet and increase visibility LNAV Cat. A and circling Cat. A ¼ mile. VDP NA when using Wenatchee altimeter setting.

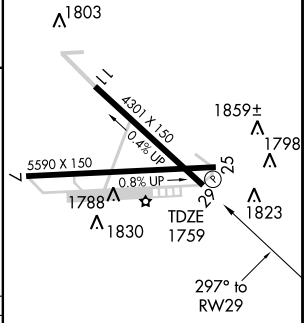
MISSED APPROACH: Climbing right turn to 5400 direct ELIYO and hold, continue climb-in hold to 5400.

ASOS	SEATTLE CENTER	UNICOM
118.375	132.6 269.35	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2560-1 801 (800-1)	2560-1¼ 801 (800-1¼)	NA	
CIRCLING	2560-1 796 (800-1)	2560-1¼ 796 (800-1¼)	NA	



REIL Rwy 29
MIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC ELN 117.9 Chan 126	APP CRS 260°	Rwy Idg N/A TDZE N/A Apt Elev 1764

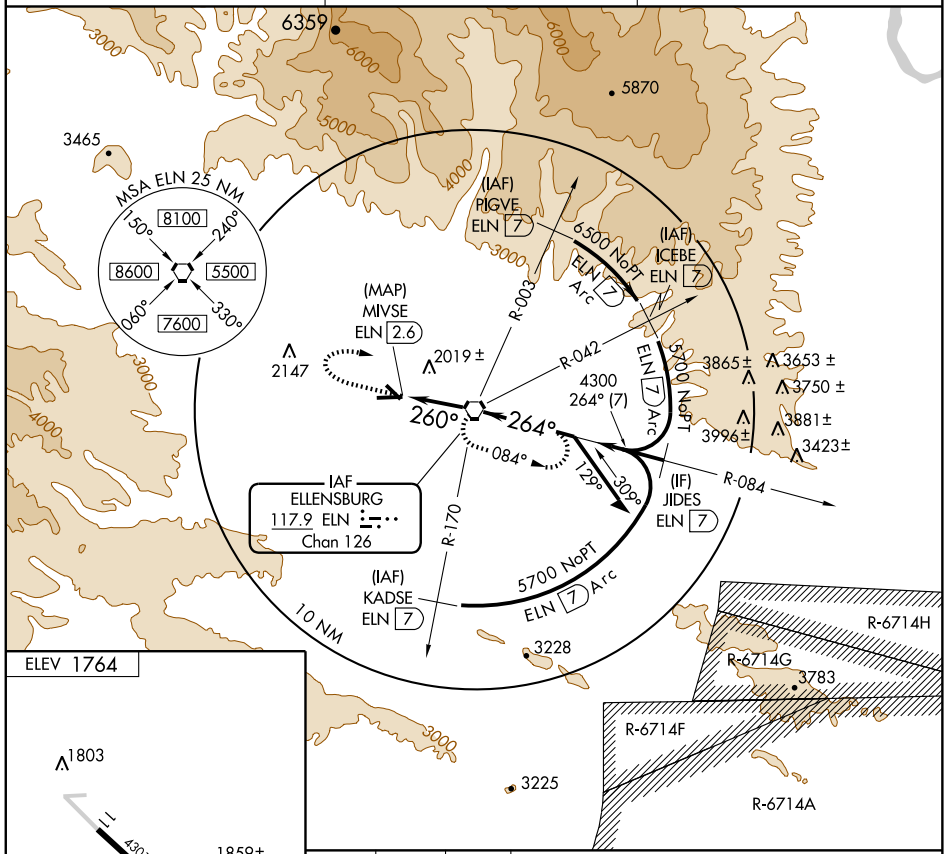
VOR-B

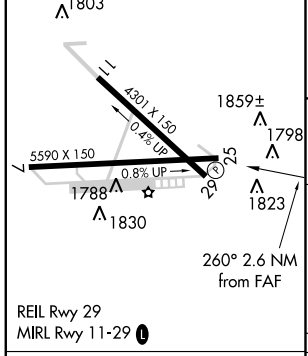
ELLENSBURG/ BOWERS FIELD (ELN)

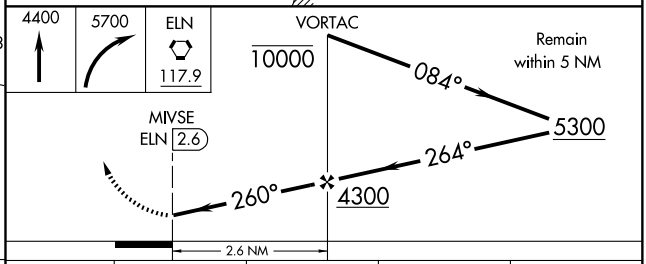
When local altimeter setting not received, use Wentachee altimeter setting.

MISSED APPROACH: Climb to 4400 then climbing right turn to 5700 direct to ELN VORTAC and hold, continue climb-in-hold to 5700.

ASOS	SEATTLE CENTER	UNICOM
118.375	132.6 269.35	123.0 (CTAF) L







FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

CATEGORY	A	B	C	D
CIRCLING	3260-1¼ 1496 (1500-1¼)	NA		

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC ELN 117.9 Chan 126	APP CRS 260°	Rwy Idg N/A TDZE N/A Apt Elev 1763

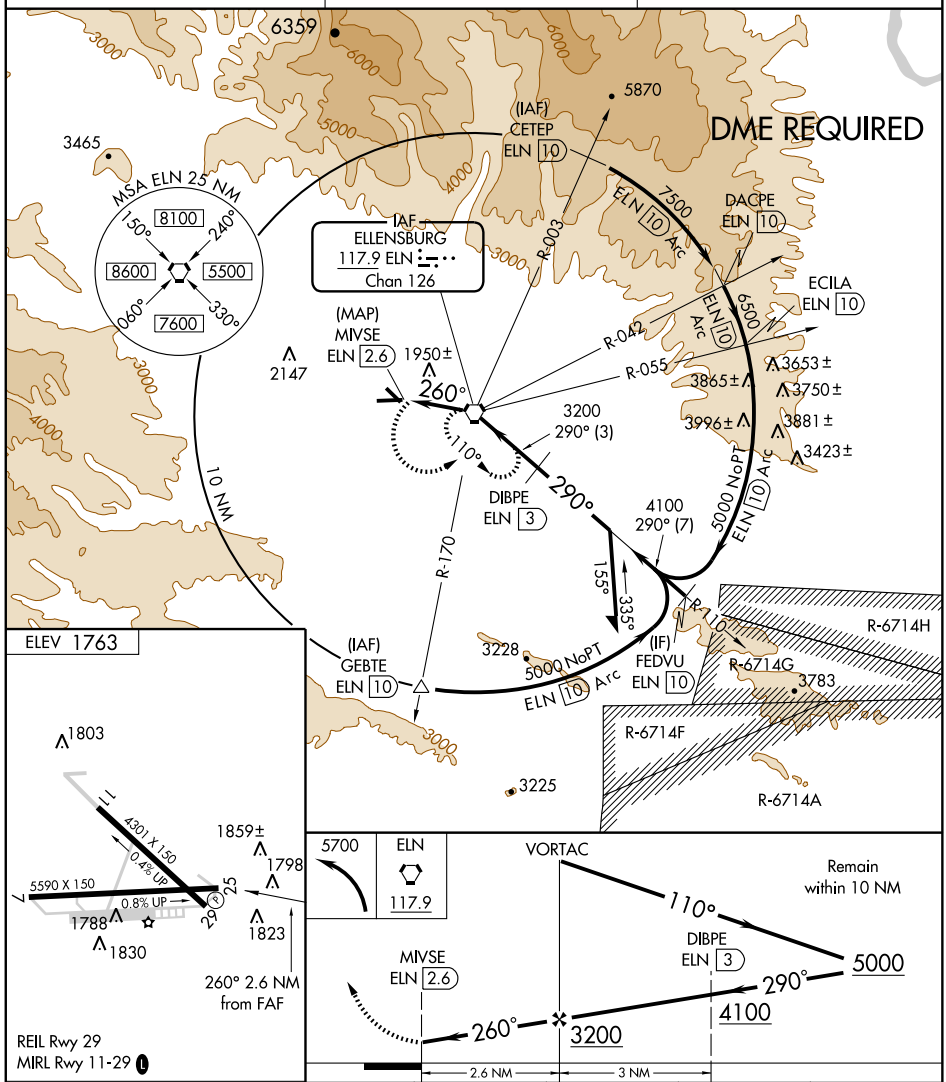
VOR/DME-A

ELLENSBURG/BOWERS FIELD (ELN)

NA If local altimeter setting not received, use Wenatchee altimeter setting and increase all MDAs 140 feet. Procedure not authorized when R-6714A, F, G, H are in operation.

MISSED APPROACH: Climbing left turn to 5000 direct to ELN VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
118.375	132.6 269.35	123.0 (CTAF) L



FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

CATEGORY	A	B	C	D
CIRCLING	2280-1 517 (600-1)	2340-1 577 (600-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5500
CH 50208	027°	TDZE	1269
W03A		Apt Elev	1276

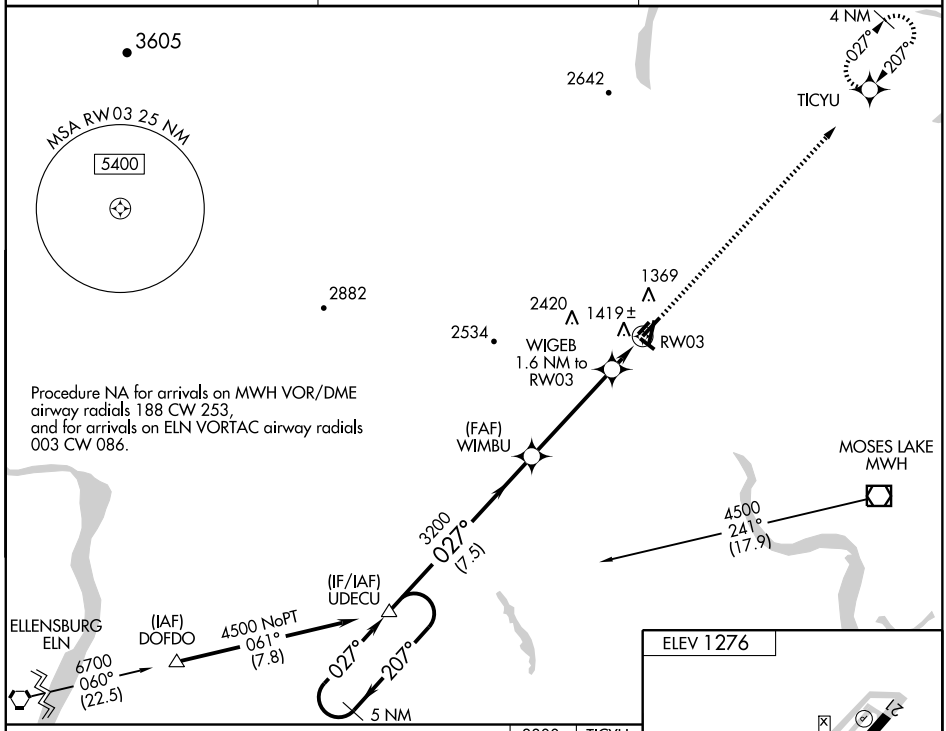
RNAV (GPS) RWY 3

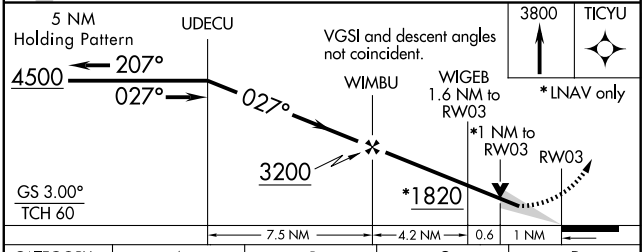
EPHRATA MUNI (EPH)

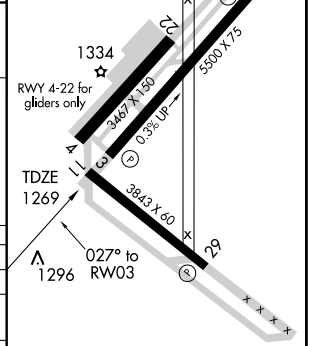
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/MDA 40 feet and LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3800 direct TICYU and hold.

ASOS	GRANT COUNTY APP CON *	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1519-1 250 (300-1)			
LNAV/VNAV DA	1689-1½ 420 (500-1½)			
LNAV MDA	1680-1 411 (500-1)		1680-1¼ 411 (500-1¼)	
CIRCLING	1720-1 444 (500-1)	1740-1 464 (500-1)	1780-1½ 504 (600-1½)	2500-3 1224 (1300-3)

REIL Rwys 11 and 29 L

MIRL Rwys 11-29 and 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5500
CH 82308	207°	TDZE	1276
W21A		Apt Elev	1276

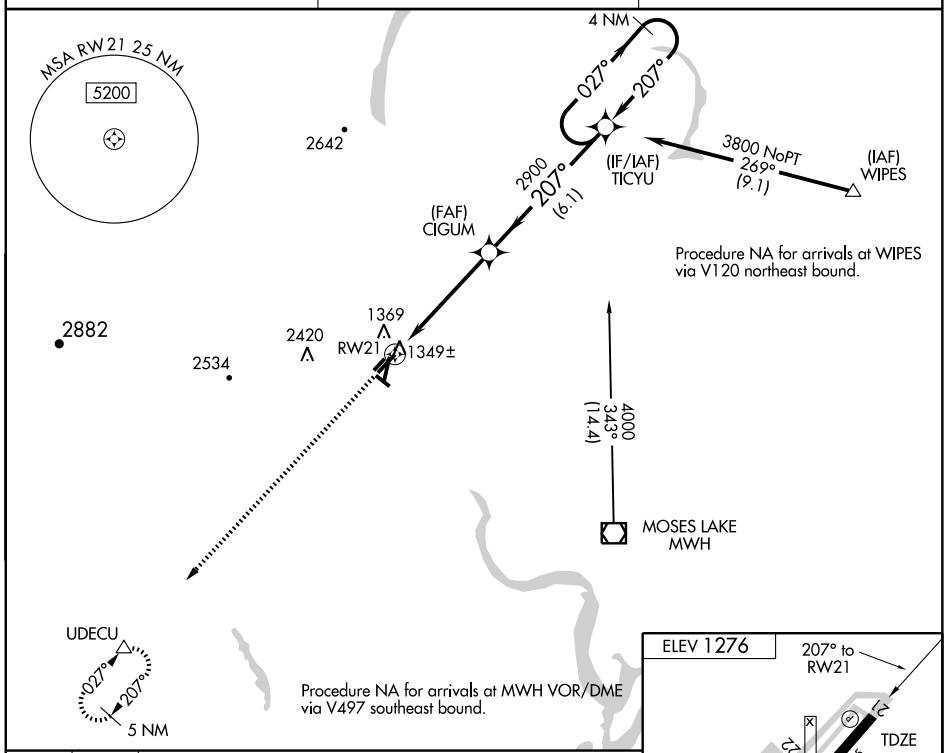
RNAV (GPS) RWY 21

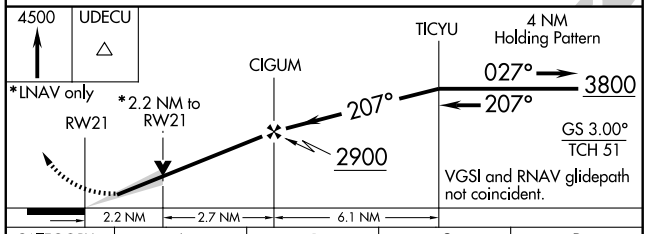
EPHRATA MUNI (EPH)

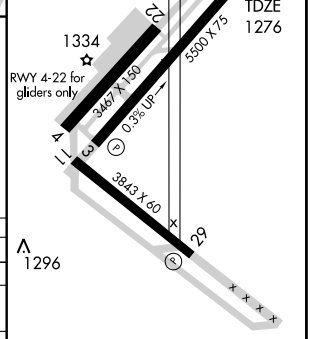
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/MDA 40 feet; Increase visibility LPV all Cats., LNAV Cats. C and D and Circling Cat. C ¼ mile.

MISSED APPROACH: Climb to 4500 direct UDECU and hold.

ASOS	GRANT COUNTY APP CON *	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1526-¾ 250 (300-¾)			
LNAV/VNAV DA	2171-4 895 (900-4)			
LNAV MDA	2020-1 744 (800-1)	2020-1¼ 744 (800-1¼)	2020-2¼ 744 (800-2¼)	2020-2½ 744 (800-2½)
CIRCLING	2020-1 744 (800-1)	2020-1¼ 744 (800-1¼)	2020-2¼ 744 (800-2¼)	2500-3 1224 (1300-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

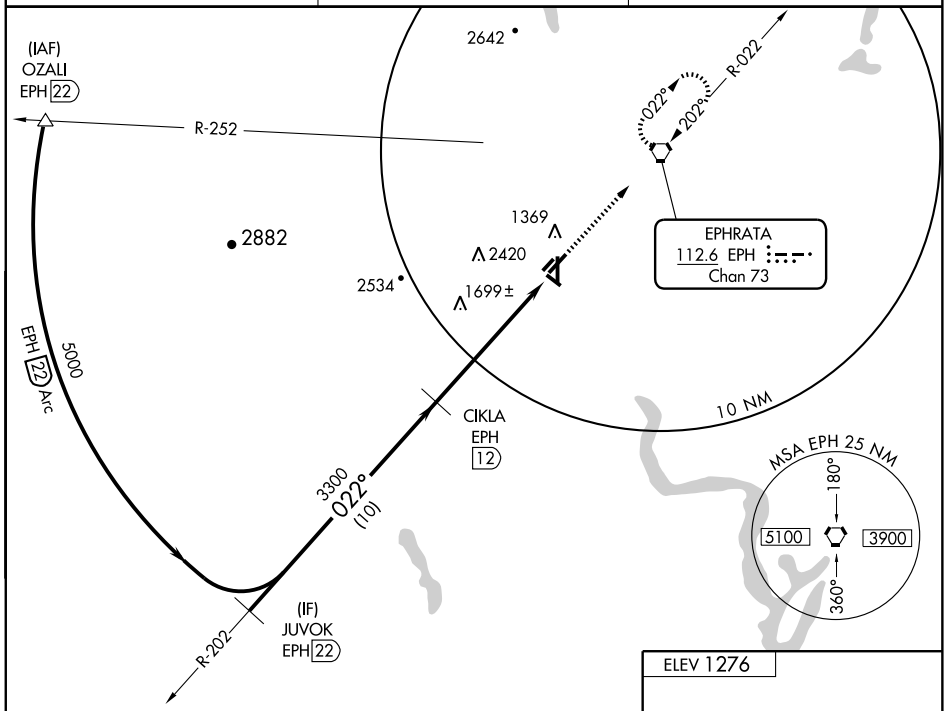
VORTAC EPH	APP CRS	Rwy Idg	5500
112.6	022°	TDZE	1269
Chan 73		Apt Elev	1276

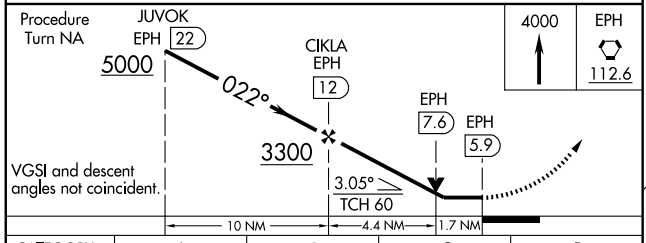
VOR/DME RWY 3
EPHRATA MUNI (EPH)

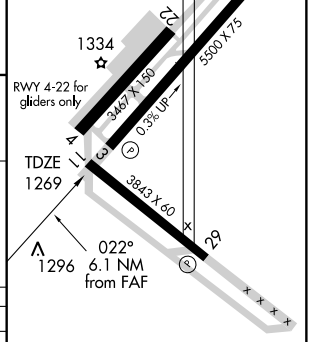
▼ When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all MDA 40 feet.
▲ VDP NA when using Moses Lake/Grant County Intl altimeter setting.

MISSED APPROACH: Climb to 4000 direct EPH VORTAC and hold, continue climb-in-hold to 4000.

ASOS	GRANT COUNTY APP CON ★	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-3	1960-1	691 (700-1)	1960-2 691 (700-2)	1960-2¼ 691 (700-2¼)
CIRCLING	1960-1	684 (700-1)	1960-2 684 (700-2)	2500-3 1224 (1300-3)

REIL Rwys 11 and 29 L
MIRL Rwys 11-29 and 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC EPH	APP CRS	Rwy Idg	5500
112.6	202°	TDZE	1276
Chan 73		Apt Elev	1276

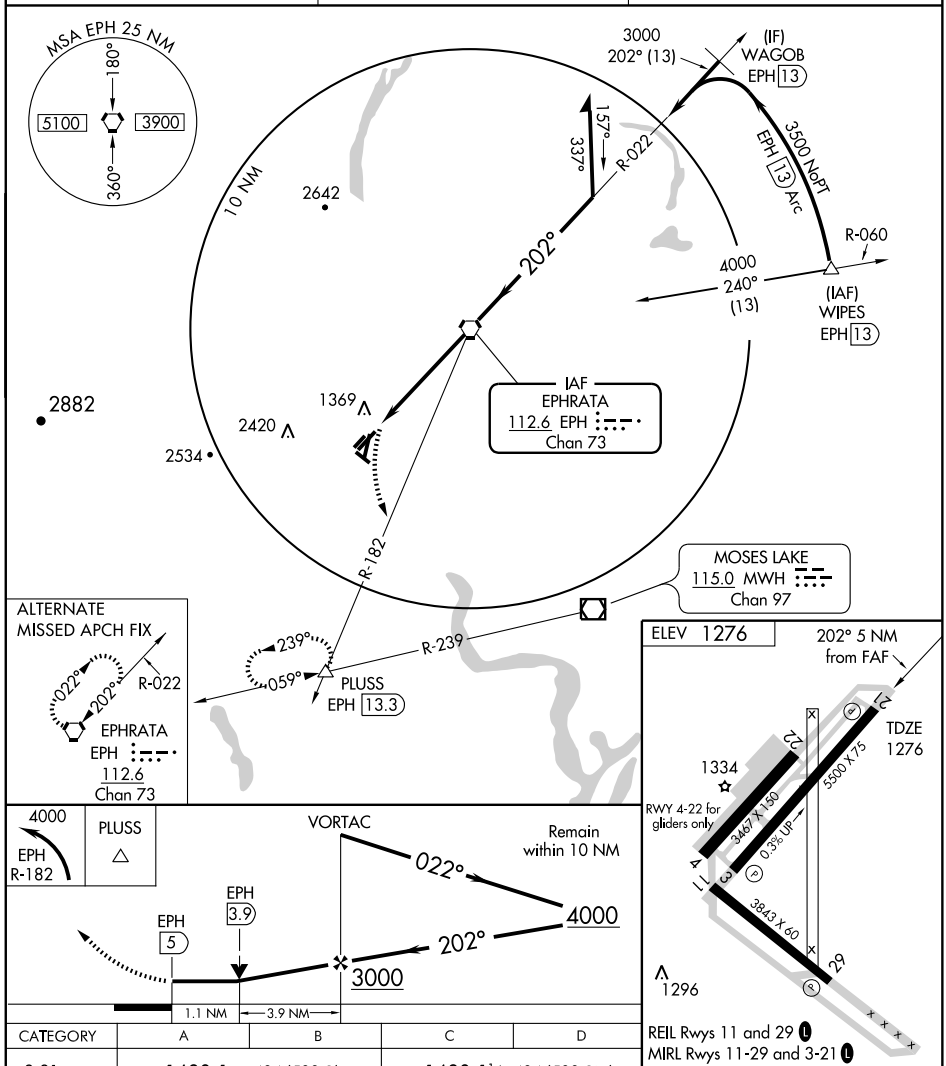
VOR RWY 21

EPHRATA MUNI (EPH)

When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all MDA 40 feet, increase S-21 Cat D visibility 1/4 mile. VDP NA when using Moses Lake/Grant County Intl altimeter setting. Final approach from EPH VORTAC holding pattern not authorized. Procedure turn required.

MISSED APPROACH: Climbing left turn to 4000 via EPH R-182 to PLUSS INT/EPH 13.3 DME and hold. Continue climb-in-hold to 4000.

ASOS	GRANT COUNTY APP CON★	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-21	1680-1	404 (500-1)	1680-1¼	404 (500-1¼)
CIRCLING	1720-1 444 (500-1)	1740-1 464 (500-1)	1780-1½ 504 (600-1½)	2500-3 1224 (1300-3)

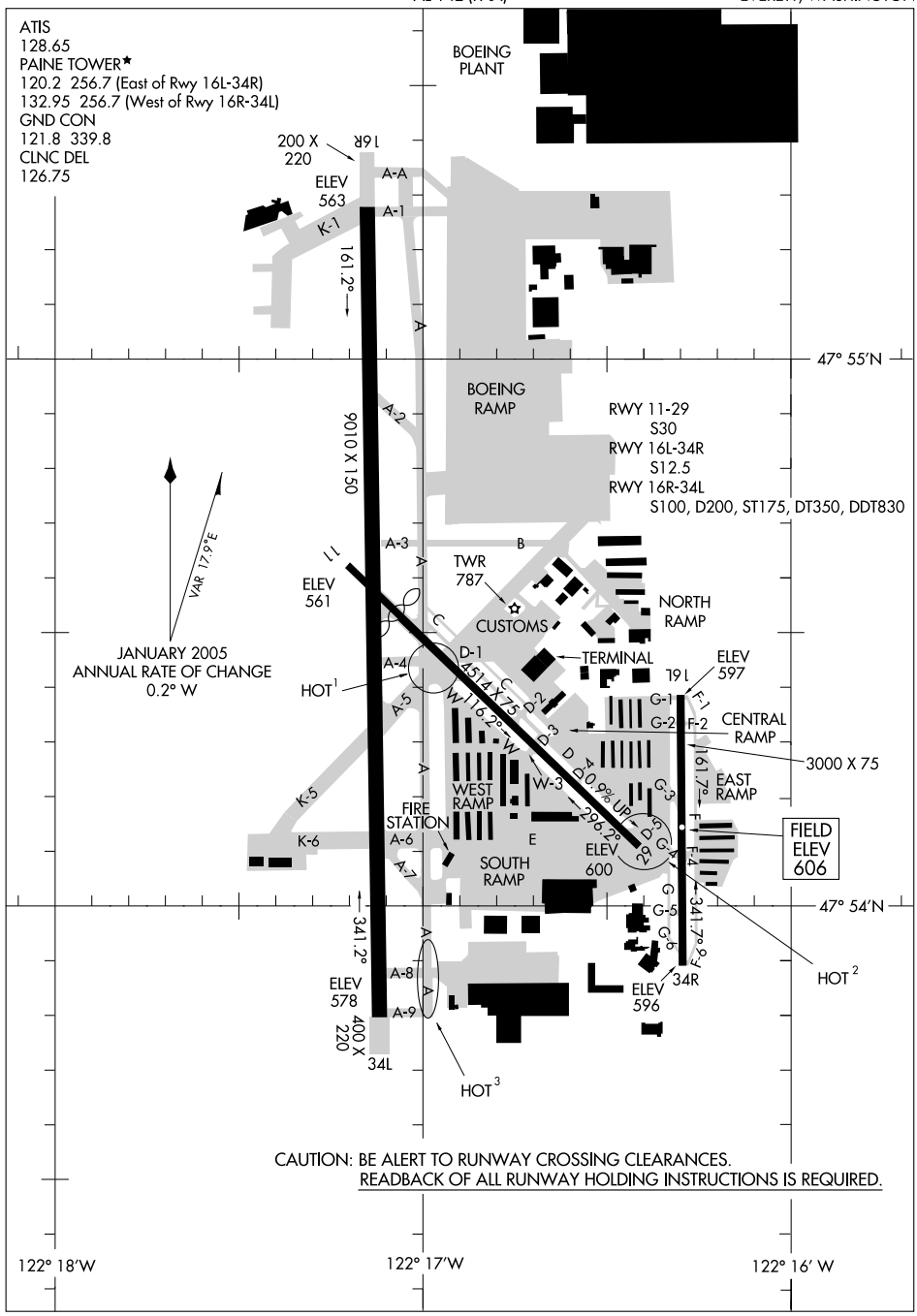
FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NW-1, 14 JAN 2010 to 11 FEB 2010

09351

AIRPORT DIAGRAM

EVERETT/ SNOHOMISH COUNTY (PAINE FIELD) (PAE)
AL-142 (FAA)
EVERETT, WASHINGTON



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-PAE	APP CRS	Rwy Idg	9010
109.3	159°	TDZE	570
		Apt Elev	606

ILS or LOC/DME RWY 16R

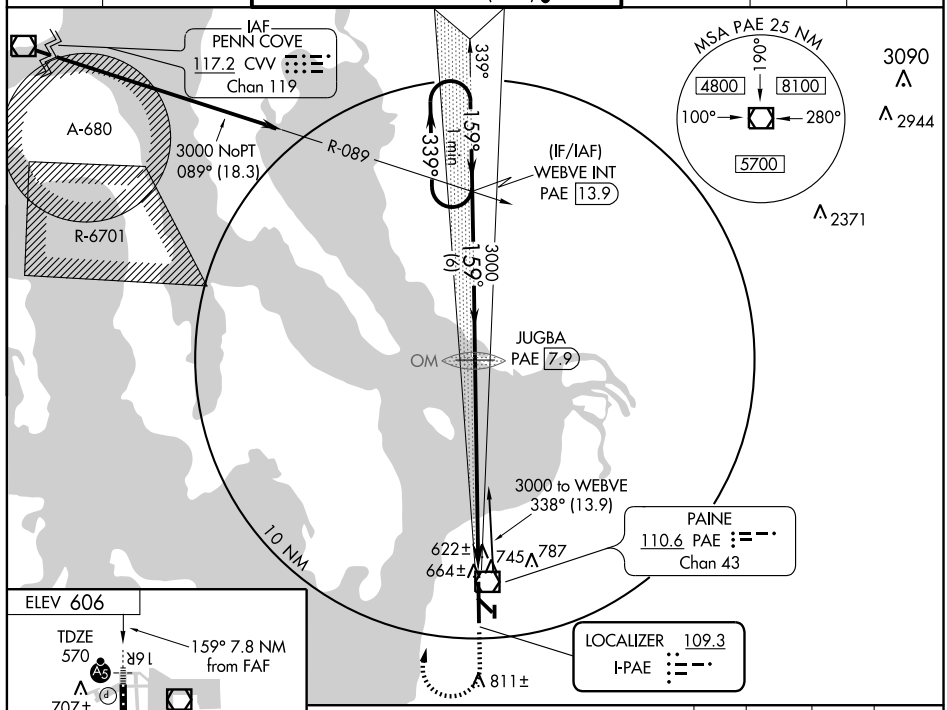
EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

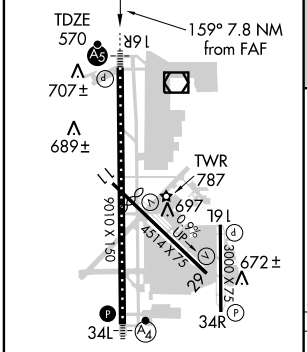
DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting: increase DA to 858 feet; increase all MDA 100 feet, increase S-LOC 16R Cat C visibility to RVR 5000, Cat D to RVR 6000. For inoperative MALSR when using Seattle-Tacoma Intl altimeter setting, increase S-ILS 16R all Cats visibilities to RVR 5000.

MALSR

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 via heading 014° and PAE VOR/DME R-338 to WEBVE INT/ PAE 13.9 DME and hold.

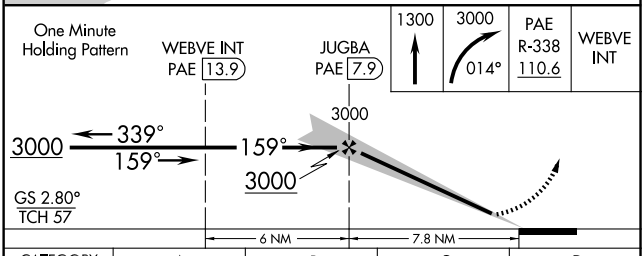
ATIS	SEATTLE CENTER	PAINE TOWER★ (E of Rwy 16L-34R)	PAINE TOWER★ (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
128.65	128.5 306.9	120.2 256.7	132.95 (CTAF) L 256.7	121.8 339.8	126.75	122.95





HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

FAF to MAP 7.8 NM					
Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36

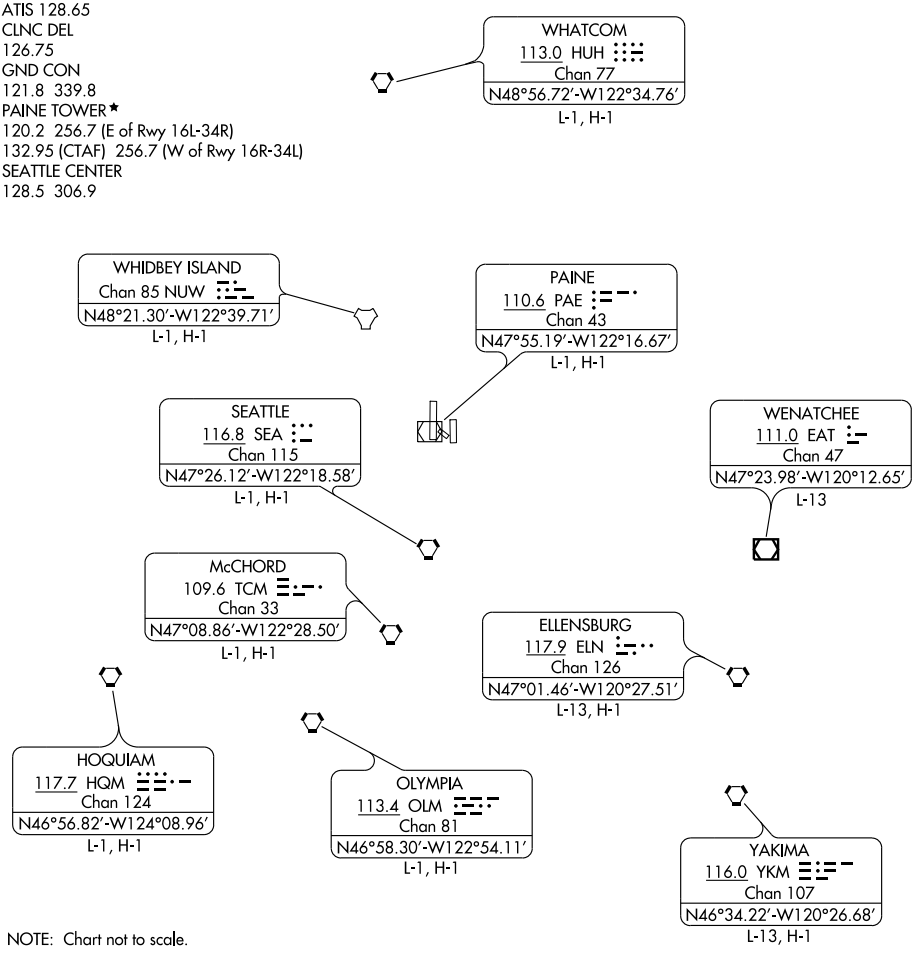


CATEGORY	A	B	C	D
S-ILS 16R	786/24 216 (200-½)			
S-LOC 16R	1020/24 450 (500-½)		1020/40 450 (500-¾)	1020/50 450 (500-1)
CIRCLING	1100-1 494 (500-1)		1100-1½ 494 (500-1½)	1160-2 554 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

PAINE TWO DEPARTURE

ATIS 128.65
CLNC DEL
126.75
GND CON
121.8 339.8
PAINE TOWER ★
120.2 256.7 (E of Rwy 16L-34R)
132.95 (CTAF) 256.7 (W of Rwy 16R-34L)
SEATTLE CENTER
128.5 306.9



NOTE: Chart not to scale.

NOTE: Center may assign initial heading to be flown and vector departures in all quadrants within 10 miles of the Paine Airport provided no altitude restrictions are imposed prior to reaching MVA.

DEPARTURE ROUTE DESCRIPTION

Fly Runway heading or as assigned; expect vectors to join assigned route.

Maintain assigned altitude; expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If not in contact with SEATTLE CENTER upon reaching 2000', continue climb to assigned altitude and proceed direct to PAE VOR/DME. Thence via assigned route.

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9010
CH 60911	159°	TDZE	570
W16A		Apt Elev	606

RNAV (GPS) RWY 16R

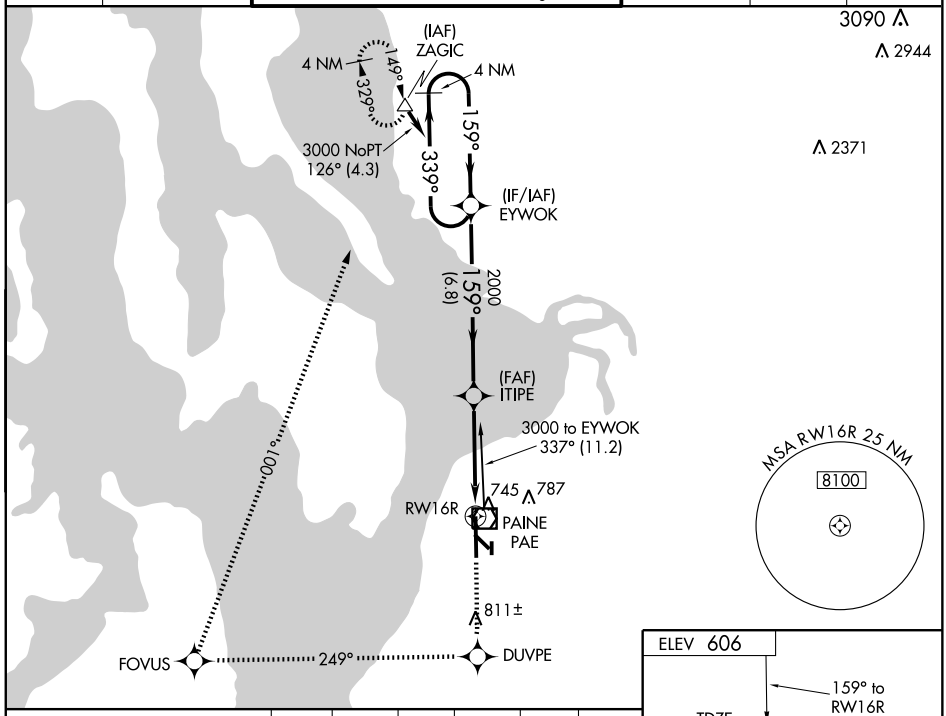
EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

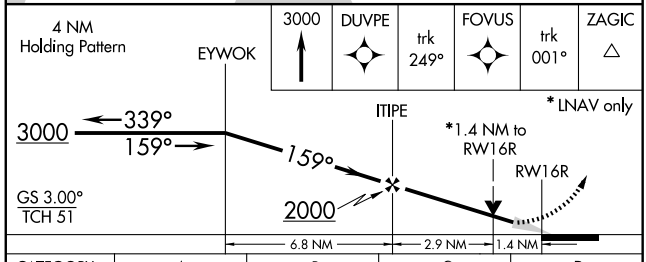
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP-0.3 NA. VGSI and RNAV glidepath not coincident.
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000.

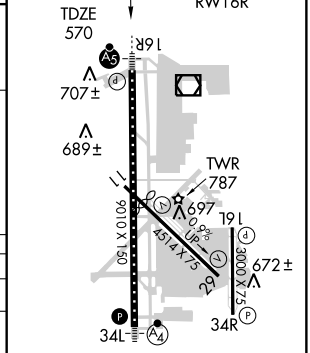
MALSR

MISSED APPROACH: Climb to 3000 direct DUVPE and via track 249° to FOVUS and via track 001° to ZAGIC and hold.

ATIS	SEATTLE CENTER	PAINE TOWER★ (E of Rwy 16L-34R)	PAINE TOWER★ (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
128.65	128.5 306.9	120.2 256.7	132.95 (CTAF) L 256.7	121.8 339.8	126.75	122.95







CATEGORY	A	B	C	D
LPV DA	830/24 260 (300-½)			
LNAV/VNAV DA	1045/60 475 (500-1¼)			
LNAV MDA	1060/24 490 (500-½)		1060/40 490 (500-¾)	1060/50 490 (500-1)
CIRCLING	1100-1 494 (500-1)		1100-1½ 494 (500-1½)	1180-2 574 (600-2)

REIL Rwys 16L and 34R
HIRL Rwy 16R-34L L
MIRL Rwys 11-29 and 16L-34R

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9010
CH 65611	339°	TDZE	579
W34A		Apt Elev	606

RNAV (GPS) RWY 34L

EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

DME/DME RNP-0.3 NA.
Baro-VNAV NA below -16°C (4°F).
Inoperative table does not apply to LPV and LNAV/VNAV all Cats and LNAV Cat C.

MALSF

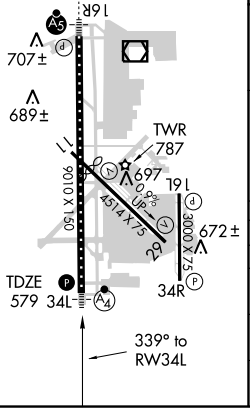
MISSED APPROACH: Climb to 3000 direct EYWOK and hold.

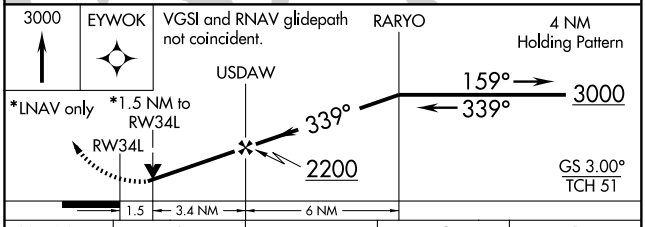
ATIS	SEATTLE CENTER	PAINE TOWER* (E of Rwy 16L-34R)	PAINE TOWER* (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
128.65	128.5 306.9	120.2 256.7	132.95 (CTAF) L 256.7	121.8 339.8	126.75	122.95

MISSED APCH FIX
4 NM 159° 339° EYWOK

PAINE PAE
745 787
RW34L
3000 to RARYO
161° (12.3)
747±
811±
(FAF)
USDAW
1655
2200
339° (6)
(IF/IAF)
RARYO
159°
339°
4 NM
MSA RW34L 25 NM
7600
(IAF)
SEATTLE
SEA
3000 NoPT
344° (16.9)

ELEV 606
REIL Rwys 16L and 34R
HIRL Rwy 16R-34L L
MIRL Rwys 11-29 and 16L-34R





CATEGORY	A	B	C	D
LPV DA	920-1¼ 341 (400-1¼)			
LNAV/VNAV DA	1040-1½ 461 (500-1½)			
LNAV MDA	1140-¾ 561 (600-¾)		1140-1½ 561 (600-1½)	1140-1¾ 561 (600-1¾)
CIRCLING	1140-1½ 534 (600-1½)			1180-2 574 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME PAE	APP CRS	Rwy Idg	9010
110.6	140°	TDZE	570
Chan 43		Apt Elev	606

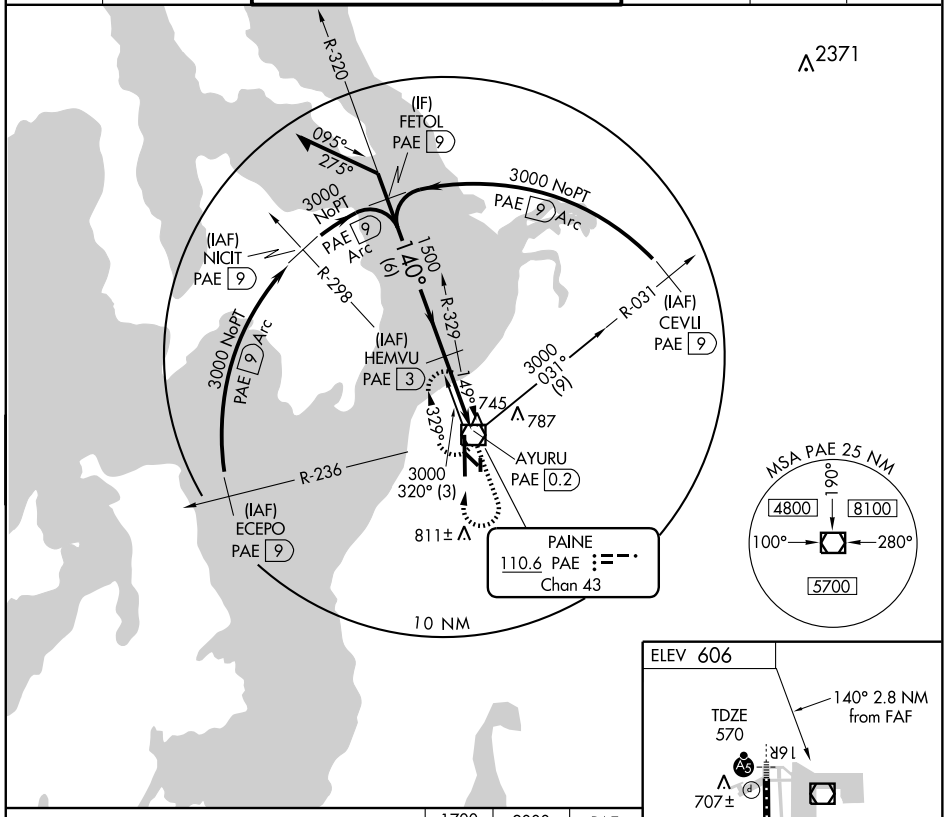
VOR/DME RWY 16R

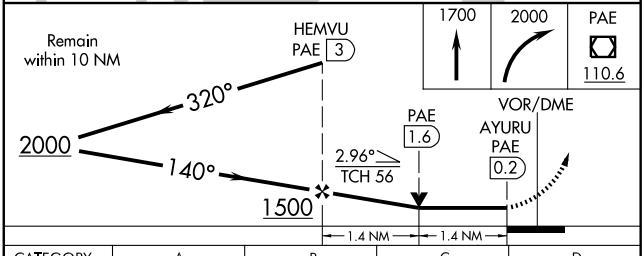
EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

MALSR

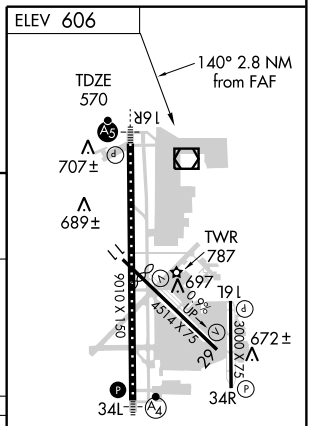
MISSED APPROACH: Climb to 1700 then climbing right turn to 2000 direct PAE VOR/DME and hold.

ATIS	SEATTLE CENTER	PAINE TOWER ★ (E of Rwy 16L-34R)	PAINE TOWER ★ (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
128.65	128.5 306.9	120.2 256.7	132.95 (CTAF) L 256.7	121.8 339.8	126.75	122.95





CATEGORY	A	B	C	D
S-16R	1060/24	490 (500-½)	1060/40 490 (500-¾)	1060/50 490 (500-1)
CIRCLING	1100-1	494 (500-1)	1100-1½ 494 (500-1½)	1180-2 574 (600-2)



HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME PAE	APP CRS	Rwy Idg	9010
110.6	140°	TDZE	570
Chan 43		Apt Elev	606

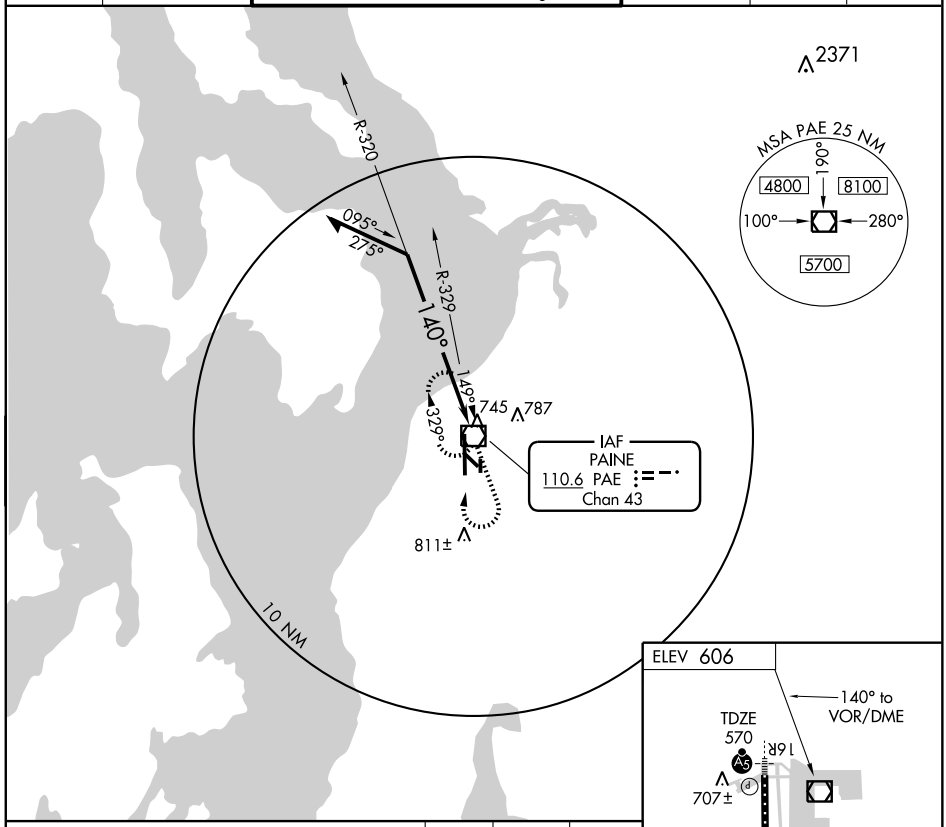
VOR RWY 16R

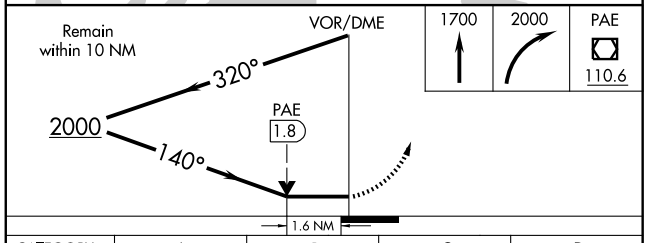
EVERETT/SNOHOMISH COUNTY (PAINE FIELD) (PAE)

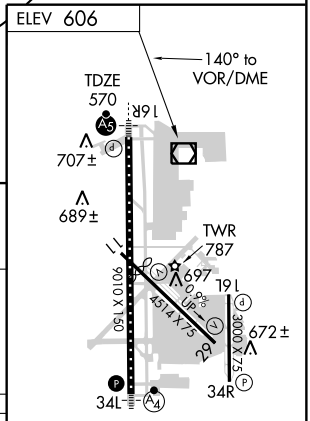
MALSR

MISSED APPROACH: Climb to 1700 then climbing right turn to 2000 direct PAE VOR/DME and hold.

ATIS	SEATTLE CENTER	PAINE TOWER★ (E of Rwy 16L-34R)	PAINE TOWER★ (W of Rwy 16R-34L)	GND CON	CLNC DEL	UNICOM
128.65	128.5 306.9	120.2 256.7	132.95 (CTAF) L 256.7	121.8 339.8	126.75	122.95



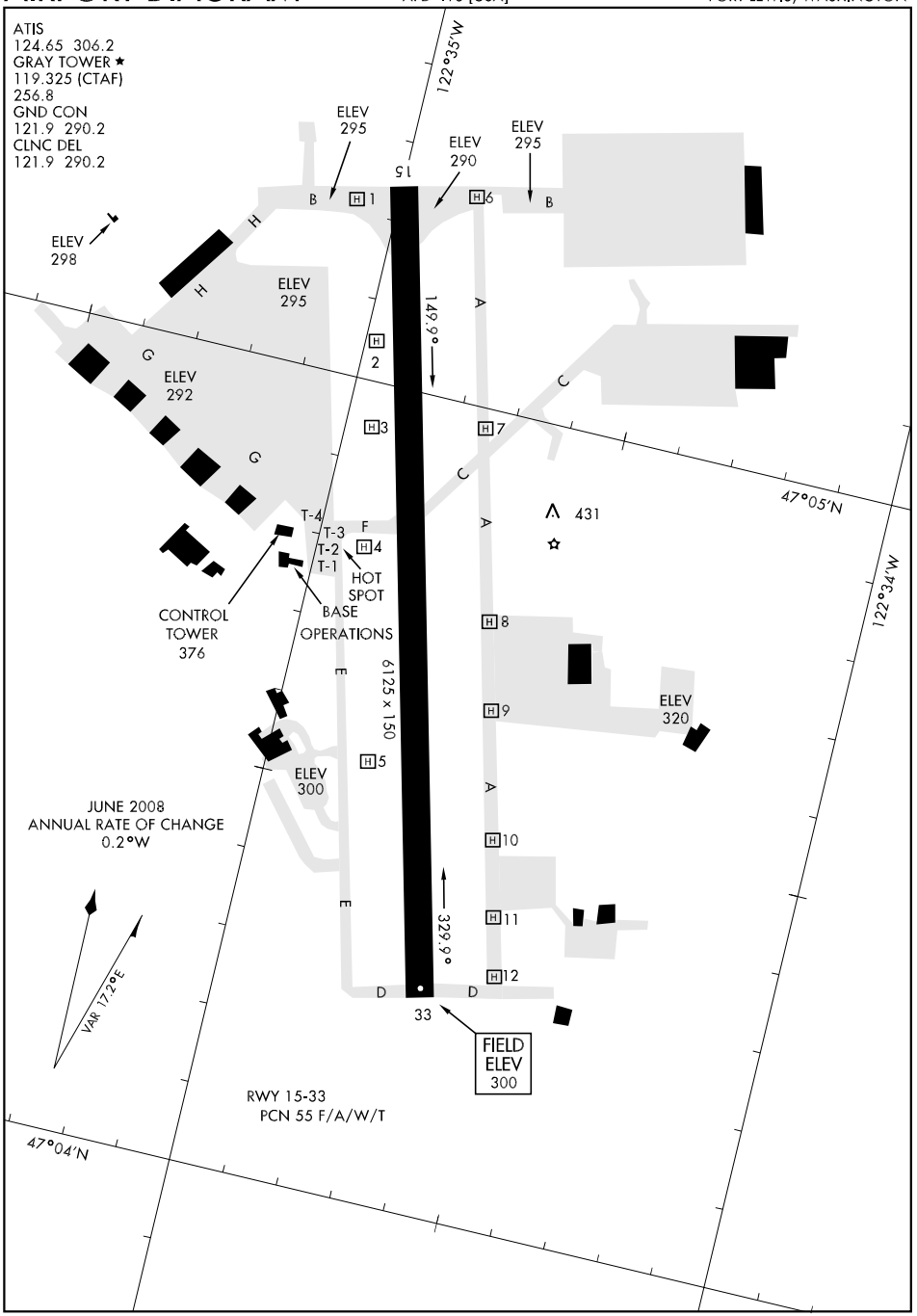




CATEGORY	A	B	C	D
S-16R	1100/24	530 (500-½)	1100/50 530 (500-1)	1100/60 530 (500-1¼)
CIRCLING	1100-1	494 (500-1)	1100-1½ 494 (500-1½)	1180-2 574 (600-2)

HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 14 JAN 2010 to 11 FEB 2010



NW-1, 14 JAN 2010 to 11 FEB 2010

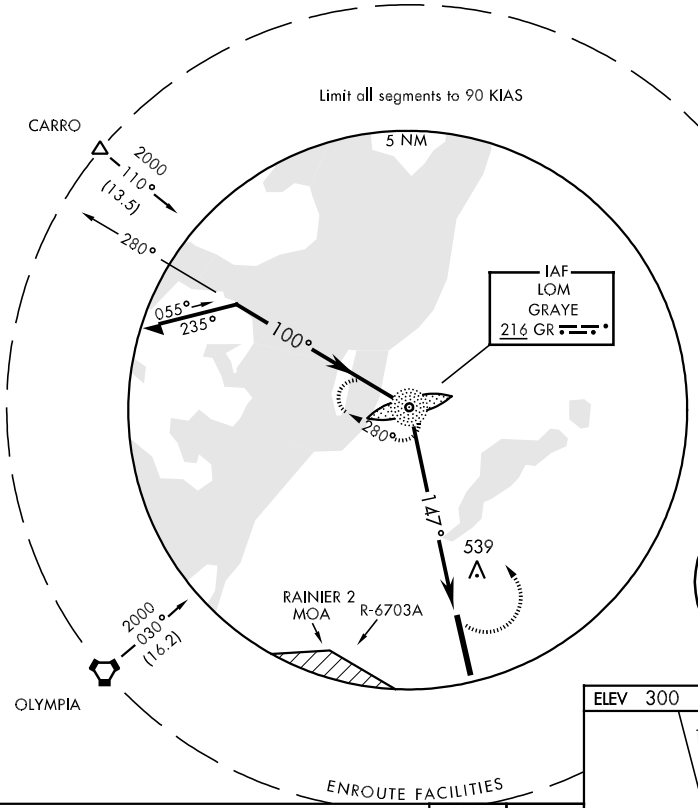
COPTER NDB RWY 15

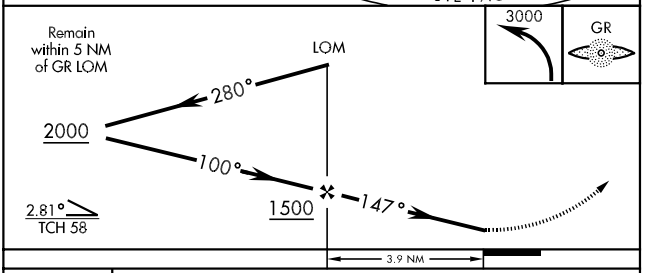
LOM GR 216	APCH CRS 147°	Rwy Idg 6125 TDZE 299 Arpt Elev 300	AL-413 [USA]	GRAY AAF (KGRF)

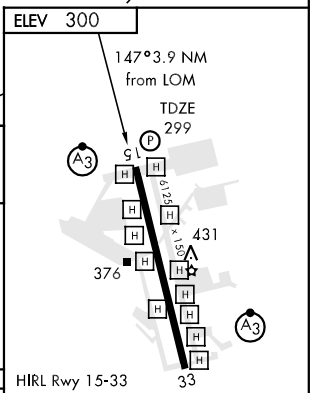
SSALR (A3)

MISSED APPROACH: Climbing left turn to 3000 direct GR LOM and hold.

ATIS	SEATTLE APP CON	GRAY TOWER ★	GND CON	CLNC DEL	PAR
124.65 306.2	120.1 290.9	119.325 (CTAF) 256.8	121.9 290.2	121.9 290.2	







CATEGORY	COPTER
H-15	840/24 541 (600-½)
S-PAR 15	499/40 200 (200-¾) GS 3.0°

FAF to MAP 3.9 NM

Knots	45	60	75	90	105
Min:Sec	5:12	3:54	3:08	2:36	2:14

NW-1, 14 JAN 2010 to 11 FEB 2010

ILS or LOC RWY 15

LOC I-GRF 108.3 Chan 20	APCH CRS 147°	Rwy ldg 6125 TDZE 294 Arpt Elev 300

AL-413 [USA]

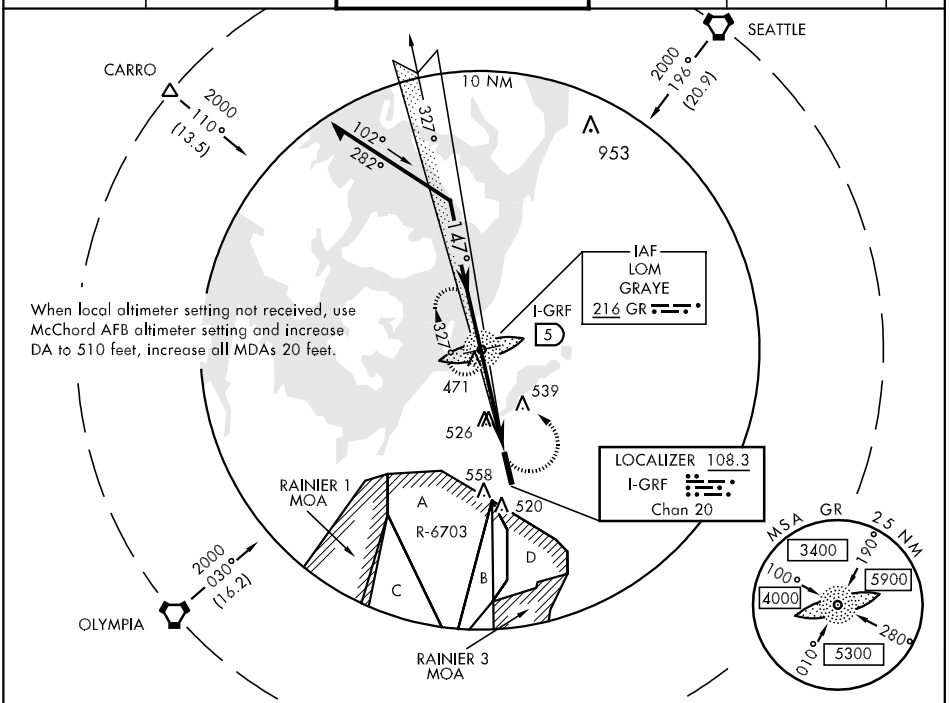
GRAY AAF (KGRF)

* When ALS inop, increase CAT AB vis by ¼ mile.
** When ALS inop, increase CAT D vis by ¼ mile.
*** Circling not authorized W of Rwy 15-33.

SSALR (A3)

MISSED APPROACH: Climb to 1000, then climbing left turn to 3000 direct GR LOM and hold, continue climb-in-hold to 3000.

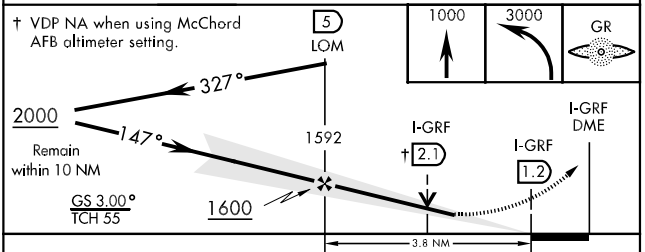
ATIS	SEATTLE APP CON	GRAY TOWER ★	GND CON	CLNC DEL	PAR
124.65 306.2	120.1 290.9	119.325 (CTAF) 256.8	121.9 290.2	121.9 290.2	

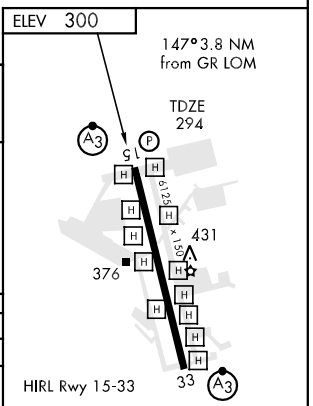


ADF REQUIRED

ENROUTE FACILITIES

† VDP NA when using McChord AFB altimeter setting.





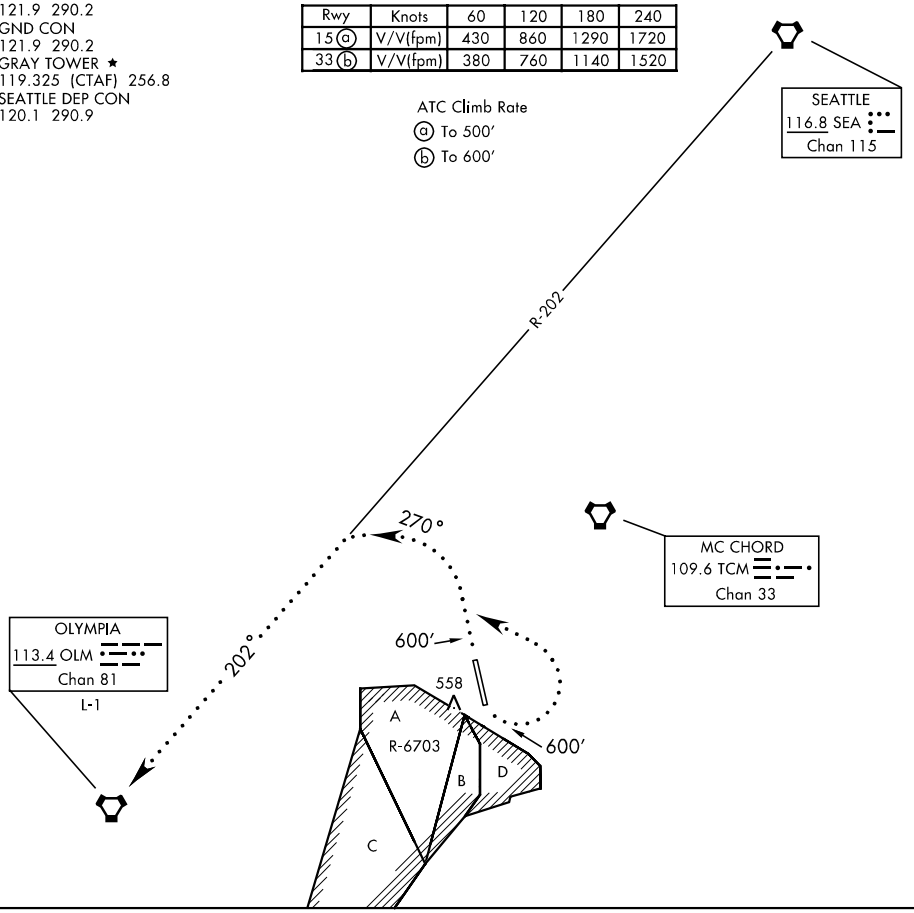
CATEGORY	A	B	C	D
S-ILS 15 *	494/24 200 (200-½)		494/40 200 (200-¾)	
S-LOC 15 **	660/40 366 (400-¾)			660/50 366 (400-1)
CIRCLING ***	780-1 480 (500-1)		780-1½ 480 (500-1½)	860-2 560 (600-2)
S-PAR 15	499/40 200 (200-¾) GS 3.0°			

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

ATIS 124.65 306.2
CLNC DEL
121.9 290.2
GND CON
121.9 290.2
GRAY TOWER ★
119.325 (CTAF) 256.8
SEATTLE DEP CON
120.1 290.9

Rwy	Knots	60	120	180	240
15ⓐ	V/V(fpm)	430	860	1290	1720
33ⓑ	V/V(fpm)	380	760	1140	1520

ATC Climb Rate
ⓐ To 500′
ⓑ To 600′



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15 AND 33:

Climb via runway heading to 600′, then turn left (unless otherwise directed by ATC) heading 270 for vectors to assigned route. Maintain altitude as assigned by ATC. Expect filed altitude within five minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within three minutes after departure, continue climb to assigned altitude, intercept and proceed via SEA R-202 to OLM VORTAC, thence via assigned route.

NDB RWY 15

LOM GR	APCH CRS	Rwy ldg	TDZE	Arpt Elev
216	147°	6125	299	300

AL-413 [USA]

GRAY AAF (KGRF)

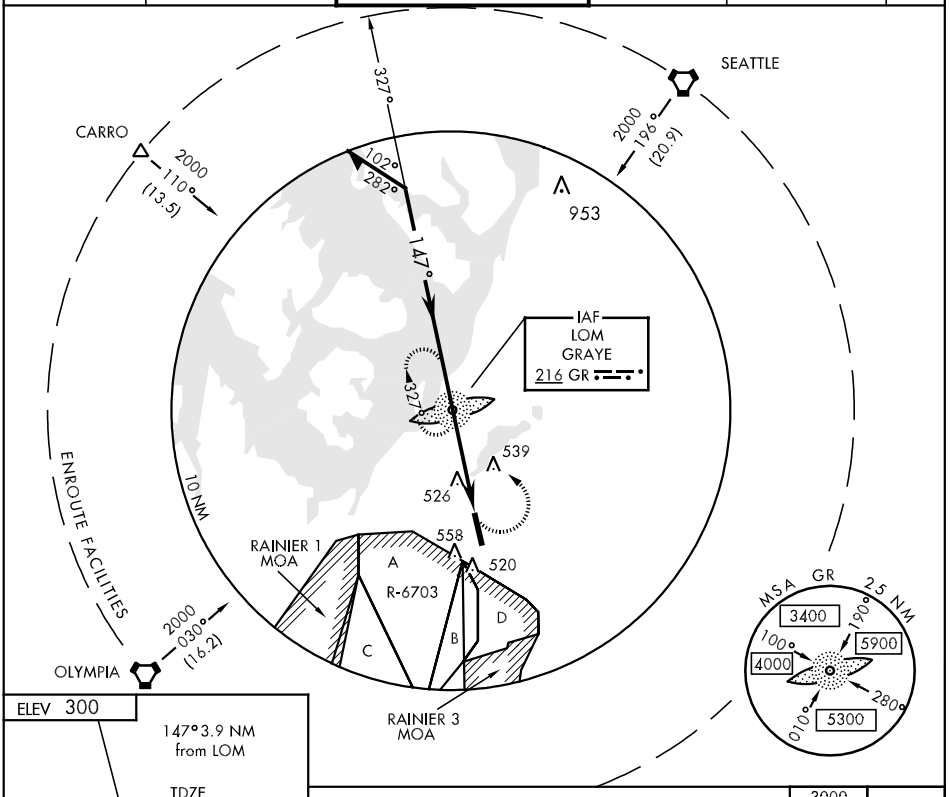
▼ If local altimeter setting not received, use McChord AFB altimeter setting and increase all MDAs 20 feet.

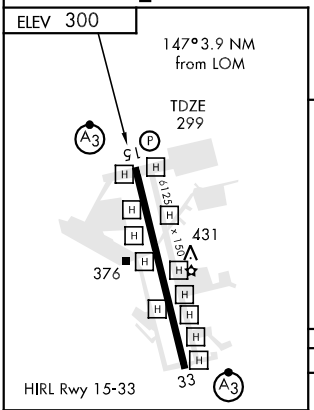
▲ * Circling not authorized W of Rwy 15-33.

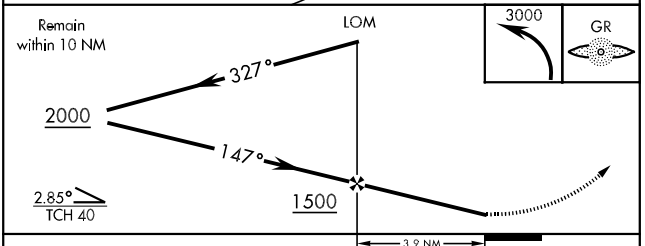
SSALR (A3)

MISSED APPROACH: Climbing left turn to 3000 direct GR LOM and hold.

ATIS	SEATTLE APP CON	GRAY TOWER *	GND CON	CLNC DEL	PAR
124.65 306.2	120.1 290.9	119.325 (CTAF) 256.8	121.9 290.2	121.9 290.2	







FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

CATEGORY	A	B	C	D
S-15	840/40 541 (600-¾)		840/60 541 (600-1¼)	840-1½ 541 (600-1½)
CIRCLING *	840-1 540 (600-1)		840-1½ 540 (600-1½)	860-2 560 (600-2)
S-PAR 15	499/40 200 (200-¾) GS 3.0°			

NDB RWY 33

GRAY AAF (KGRF)

NDB LAC	APCH CRS	Rwy ldg	6125
328	327°	TDZE	300
		Arpt Elev	300

AL-413 [USA]

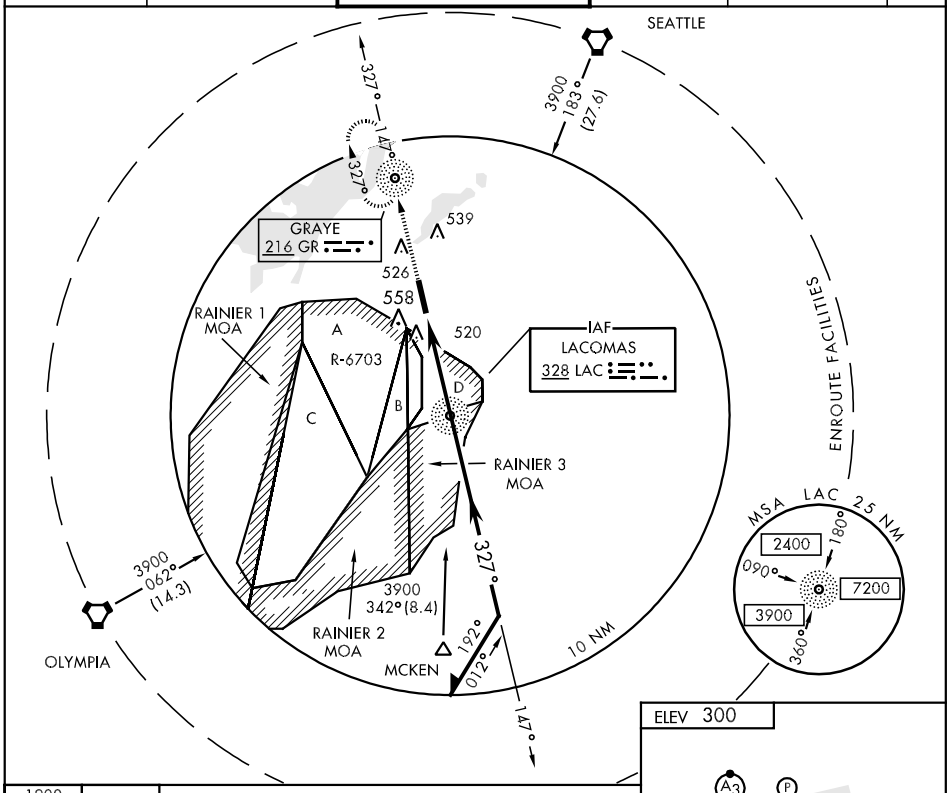
▼ If local altimeter setting not received, use McChord AFB altimeter setting and increase all MDAs 20 feet.

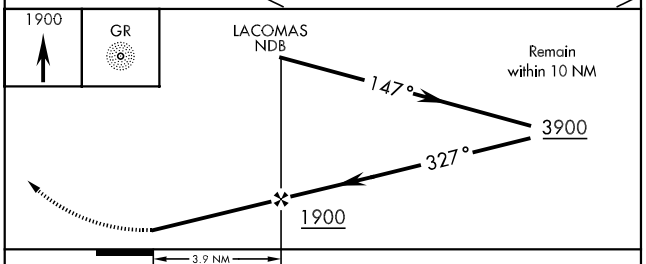
▲ * Circling not authorized W of Rwy 15-33.

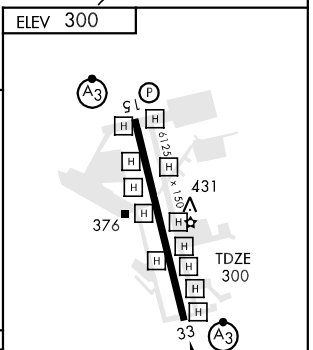
SSALR (A3)

MISSED APPROACH: Climb to 1900 direct to GR LOM and hold.

ATIS	SEATTLE APP CON	GRAY TOWER ★	GND CON	CLNC DEL	PAR
124.65 306.2	120.1 290.9	119.325 (CTAF) 256.8	121.9 290.2	121.9 290.2	







CATEGORY	A	B	C	D
S-33	860-¾ 560 (600-¾)		860-1¼ 560 (600-1¼)	NOT AUTHORIZED
CIRCLING *	860-1 560 (600-1)		860-1½ 560 (600-1½)	860-2 560 (600-2)
S-PAR 33	500-¾ 200 (200-¾) GS 3.0°			

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

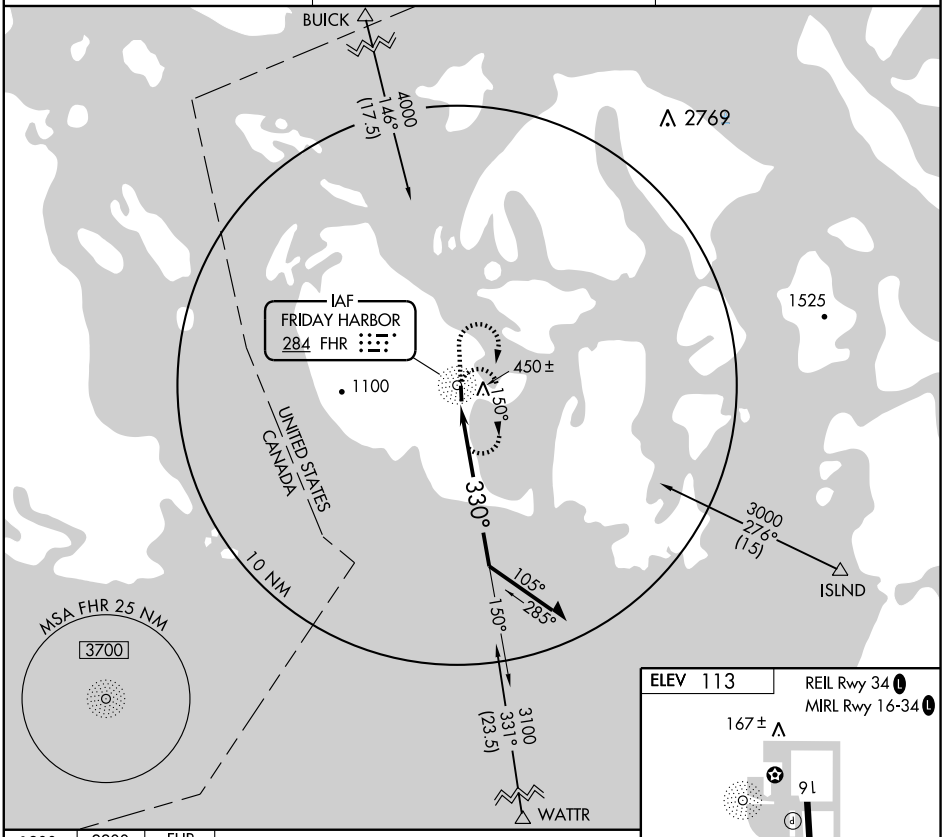
NDB FHR	APP CRS	Rwy Idg	3402
284	330°	TDZE	107
		Apt Elev	113

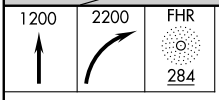
NDB RWY 34
FRIDAY HARBOR (FHR)

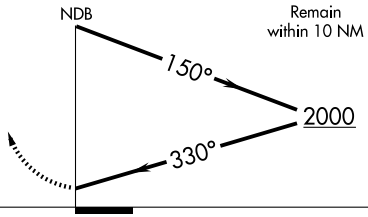
T NA — Circling not authorized west of Rwy 16-34.

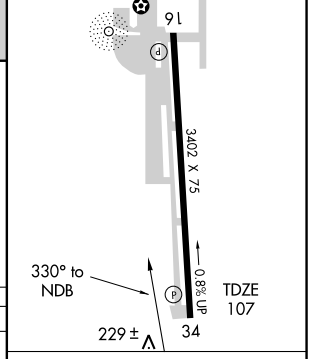
MISSED APPROACH: Climb to 1200 then climbing right turn to 2200 direct to FHR NDB and hold.

ASOS	WHIDBEY APP CON★	CTAF
135.675	118.2 285.65	128.25 L









CATEGORY	A	B	C	D
S-34	860-1 753 (800-1)	860-1¼ 753 (800-1¼)	860-2¼ 753 (800-2¼)	NA
CIRCLING	860-1 747 (800-1)	860-1¼ 747 (800-1¼)	860-2¼ 747 (800-2¼)	NA

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS Chan **40024** W34A	APP CRS **337°**	Rwy Idg **3402** TDZE **108** Apt Elev **113**

RNAV (GPS) RWY 34
FRIDAY HARBOR (FHR)

DME/DME RNP-0.3 NA.
Circling not authorized west of Rwy 16-34.
Baro-VNAV NA below -30°C (-22°F).
When VGSI inoperative, procedure NA at night.

MISSED APPROACH: Climb to 5000 direct TIYUG and via 077° track to WOBED and via 133° track to ISLND and hold.

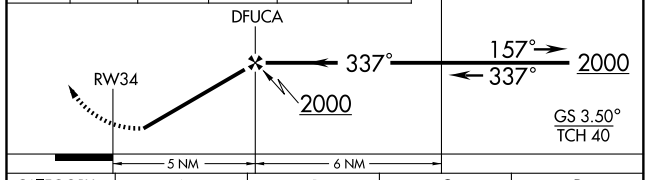
ASOS	WHIDBEY APP CON★	CTAF
135.675	**118.2 285.65**	**128.25** L

Procedure NA for arrivals at WATTR via V495 southeastbound.

BUICK
TIYUG
WOBED
MSA RW34 25 NM
3900
1525
4000 to Ugtaw
150° (29)
1100
307±
303±
RW34
UNITED STATES
CANADA
(FAF)
DFUCA
5 NM
133°
313°
ISLND
2200
219°
(9.2)
2000
337°
(6)
2000 NoPT
247° (5)
(IF/IAF)
UGTAW
(IAF)
NIKPE
157°
337°
4 NM
2000 NoPT
275°
(12.6)
(IAF)
PENN COVE
CVV
2000 NoPT
327° (12)
(IAF)
WATTR

ELEV 113
167±
9L
3402 X 75
0.8% UP
TDZE
108
229±
34
337° to
RW34
REIL Rwy 34 L
MIRL Rwy 16-34 L

5000	TIYUG	077° Track	WOBED	133° Track	ISLND	4 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	500-1¼ 392 (400-1¼)			NA
LNAV/VNAV DA	580-1½ 472 (500-1½)			NA
LNAV MDA	640-1 532 (600-1)		640-1½ 532 (600-1½)	NA
CIRCLING	780-1½ 667 (700-1)		800-2 687 (700-2)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

ILS or LOC/DME RWY 24

HOQUIAM/ BOWERMAN (HQM)

LOC/DME I-HQM	APP CRS	Rwy Idg	5000
108.7	241°	TDZE	16
Chan 24		Apt Elev	18

For inoperative MALSR, increase S-LOC Cats A and B visibility to 1 mile.
Circling NA northwest of Rwy 6-24.
Inoperative table does not apply to S-ILS Rwy 24.
When local altimeter setting not received, procedure NA.

MALSR

MISSED APPROACH: Climb to 2500 direct HQM VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L

ALTERNATE MISSED APCH FIX

LOM ABERN HQ 236

241° 061°

15 NM

LOM ABERN 236 HQ

(IAF) ULESS HQM 30

2300 NoPT 183° (7.3) and LOC (4.5)

(IF) LAMMB I-HQM 12.6

(IAF) NEYDI I-HQM 6.3

WIMET I-HQM 3

HOQUIAM 117.7 HQM Chan 124

2900 to NEYDI 061° (14.7)

306 623 493± 839± 016° 196° 061°

196 ± 241°

(COXOD)

(IAF) SOUPY HQM 30

2100 LR-067

OGELE I-HQM 0.9

697

241° (6.3)

2300 NoPT

HQM 21 Arc

2300 NoPT 286° (5.9) and LOC (4.5)

R-240 060° 240°

300

R-082

844

LOCALIZER 108.7 I-HQM Chan 24

ONPAE HQM 21

MSA HQM 25 NM

3600 120° 230° 1300 3000 350°

2487

2800 HQM 21 Arc

R-163 R-148

(IAF) PUGIC HQM 21

2800 HQM 21 Arc

(IAF) ZEDAT HQM 21

DME REQUIRED

ELEV 18

241° 5.4 NM from FAF

TDZE 16

69

50±

5000 X 150

24

2500 HQM 117.7

VGSI and ILS glidepath not coincident.
Use I-HQM DME when on LOC course.

NEYDI I-HQM 6.3

Remain within 10 NM

061° 2300

WIMET I-HQM 3

2100

OGELE I-HQM 0.9

241° 2100

*LOC only

840*

GS 3.50° TCH 55

2.1 NM 3.3 NM

CATEGORY	A	B	C	D
S-ILS 24	216-¾ 200 (200-¾)		286-1 270 (300-1)	NA
S-LOC 24	580-¾ 564 (600-¾)		580-1 564 (600-1)	NA
CIRCLING	580-1 562 (600-1)		580-1½ 562 (600-1½)	NA

REIL Rwy 6 L
HIRL Rwy 6-24 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5000
CH 82015	061°	TDZE	18
W06A		Apt Elev	18

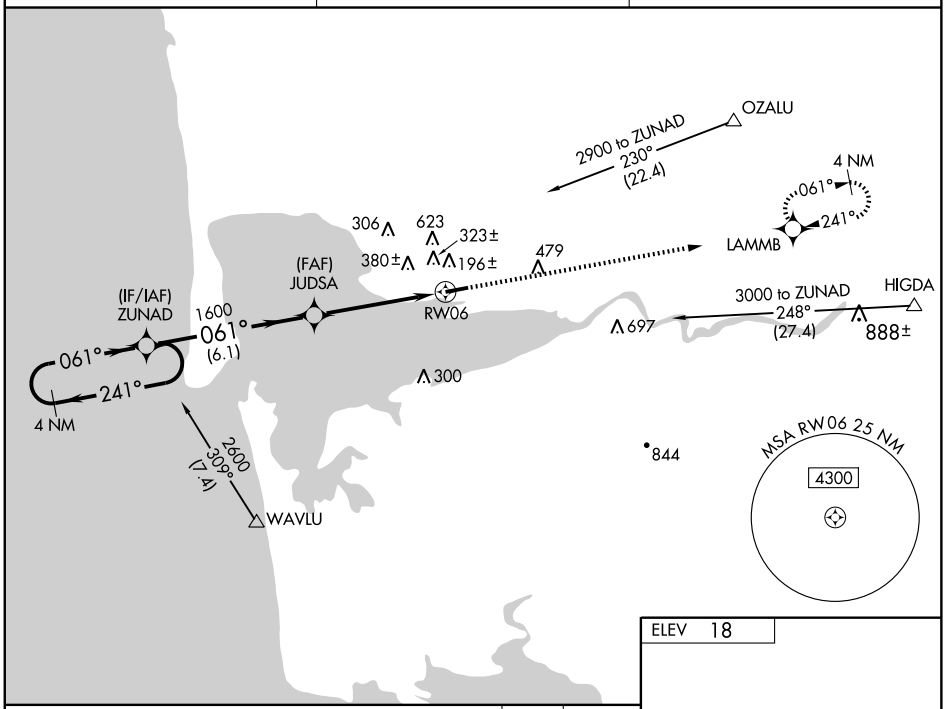
RNAV (GPS) RWY 6

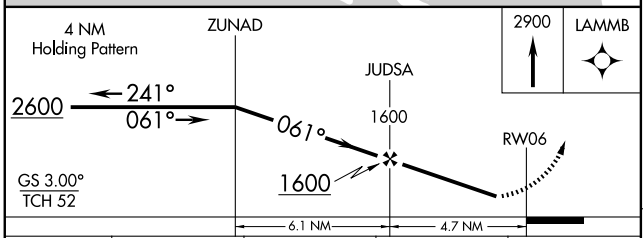
HOQUIAM/BOWERMAN (HQM)

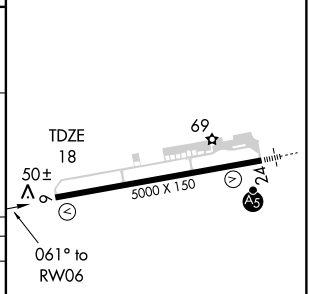
Circling NA northwest of Rwy 6-24.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118° F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2900 direct LAMMB and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	308-1 290 (300-1)			
LNAV/VNAV DA	758-2½ 740 (800-2½)			
LNAV MDA	620-1 602 (700-1)		620-1¾ 602 (700-1¾)	620-2 602 (700-2)
CIRCLING	620-1 602 (700-1)		620-1¾ 602 (700-1¾)	620-2 602 (700-2)

REIL Rwy 6 L
HIRL Rwy 6-24 L

WAAS	APP CRS	Rwy Idg	5000
CH 86902	241°	TDZE	16
W24A		Apt Elev	18

RNAV (GPS) RWY 24

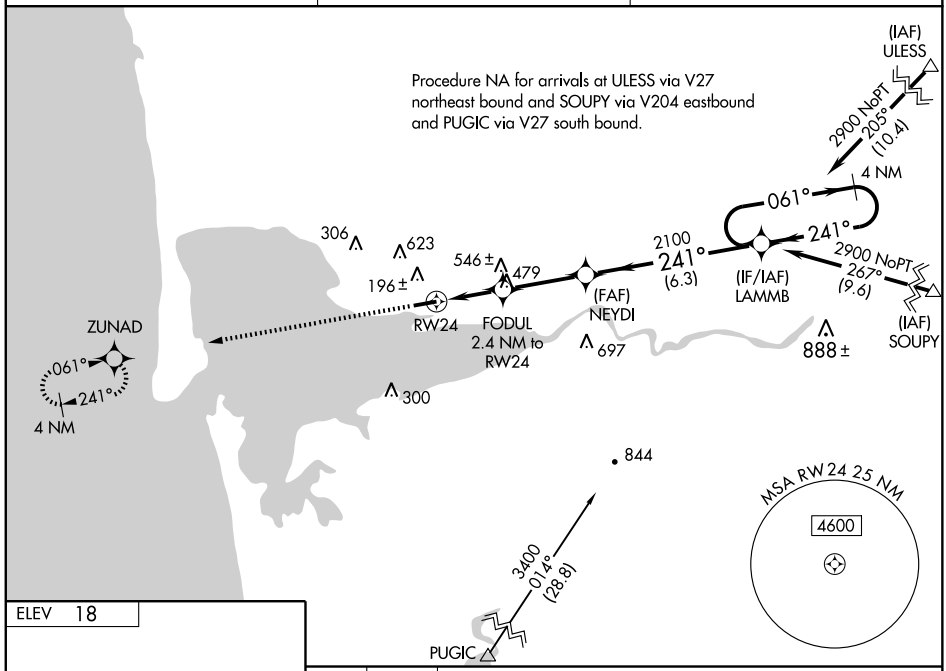
HOQUIAM/ BOWERMAN (HQM)

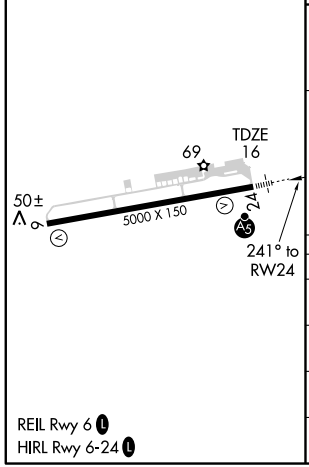
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). Inoperative table does not apply to LPV.
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
For inoperative MALSR, increase LNAV Cat A visibility to 1 mile.
Circling NA northwest of Rwy 6-24.
When local altimeter setting not received, procedure NA.

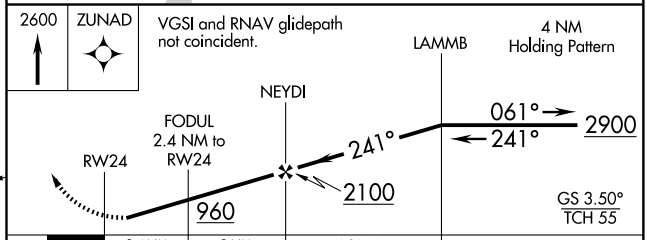
MALSR

MISSED APPROACH: Climb to 2600 direct ZUNAD and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	216-¾ 200 (200-¾)		286-1 270 (300-1)	NA
LNAV/ VNAV DA	1029-2½ 1013 (1100-2½)			NA
LNAV MDA	800-¾ 784 (800-¾)		800-1¾ 784 (800-1¾)	NA
CIRCLING	800-1 782 (800-1)	800-1¼ 782 (800-1¼)	800-2¼ 782 (800-2¼)	NA

REIL Rwy 6 L
HIRL Rwy 6-24 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC HQM 117.7 Chan 124	APP CRS 241°	Rwy Idg 5000 TDZE 16 Apt Elev 18

VOR/DME RWY 24

HOQUIAM/ BOWERMAN (HQM)

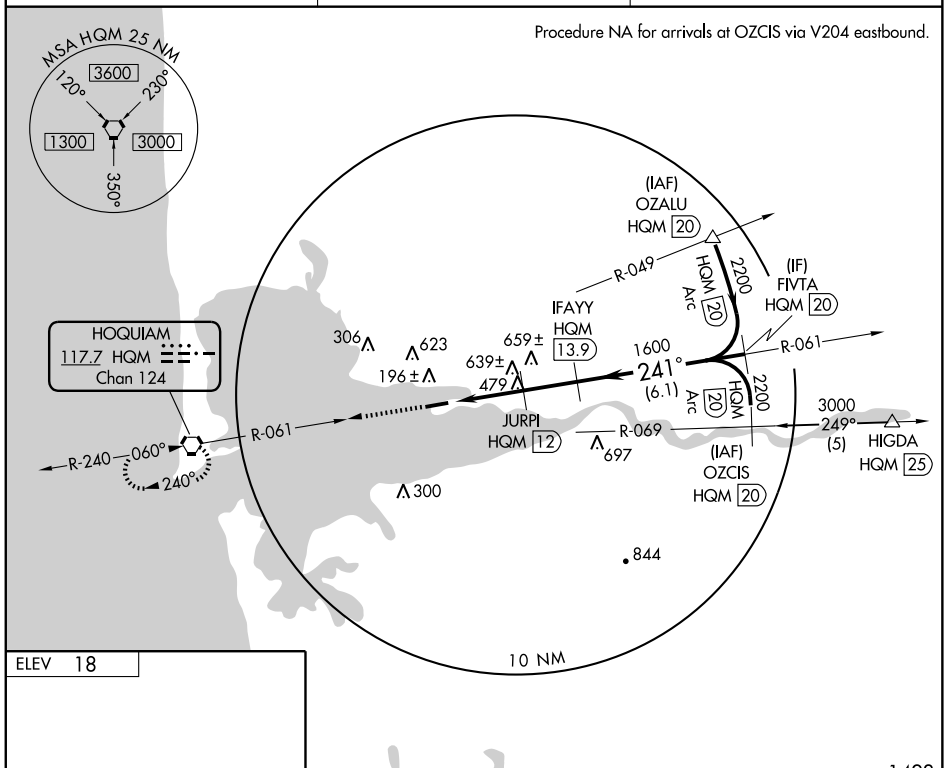
Circling NA northwest of Rwys 6 and 24.
Visibility reduction by helicopters NA.

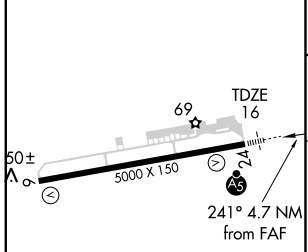
MALSR

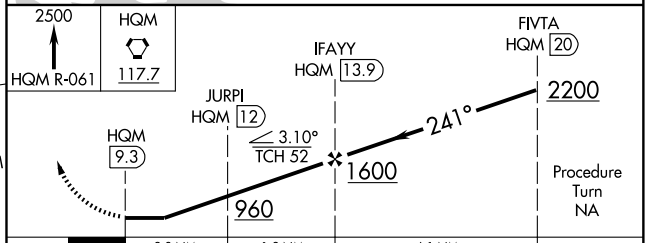
MISSED APPROACH: Climb to 2500 via HQM VORTAC R-061 to HQM VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L

Procedure NA for arrivals at OZCIS via V204 eastbound.







CATEGORY	A	B	C	D
S-24	900-¾ 884 (900-¾)		900-2¼ 884 (900-2¼)	900-2½ 884 (900-2½)
CIRCLING	900-1¼ 882 (900-1¼)		900-2¾ 882 (900-2¾)	900-3 882 (900-3)

REIL Rwy 6 L
HIRL Rwy 6-24 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC HQM 117.7 Chan 124	APP CRS 062°	Rwy Idg 5000 TDZE 18 Apt Elev 18

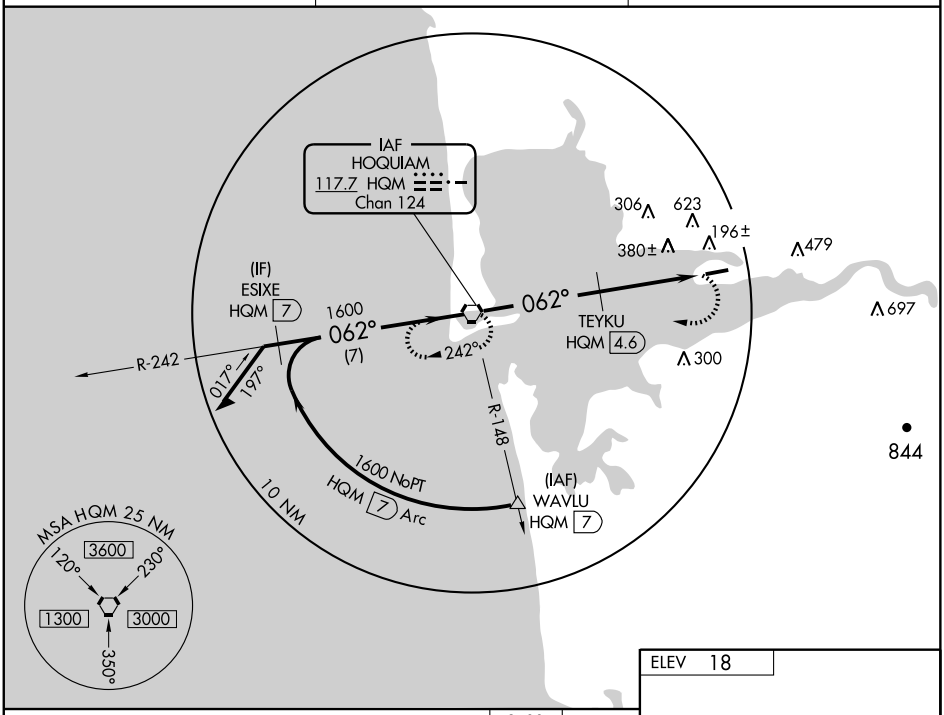
VOR RWY 6

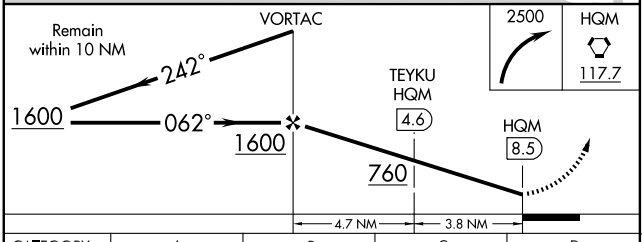
HOQUIAM/ BOWERMAN (HQM)

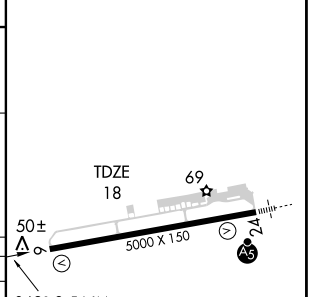
Visibility reduction by helicopters NA.
Circling NA northwest of Rwy 6 and 24.

MISSED APPROACH: Climbing right turn to 2500 direct HQM VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-6	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
CIRCLING	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
TEYKU FIX MINIMUMS				
S-6	640-1 622 (700-1)		640-1¾ 622 (700-1¾)	640-2 622 (700-2)
CIRCLING	640-1 622 (700-1)		640-1¾ 622 (700-1¾)	640-2 622 (700-2)

REIL Rwy 6 L
HIRL Rwy 6-24 L

FAF to MAP 8.5 NM					
Knots	60	90	120	150	180
Min:Sec	8:30	5:40	4:15	3:24	2:50

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4391
120°	TDZE	16
	Apt Elev	17

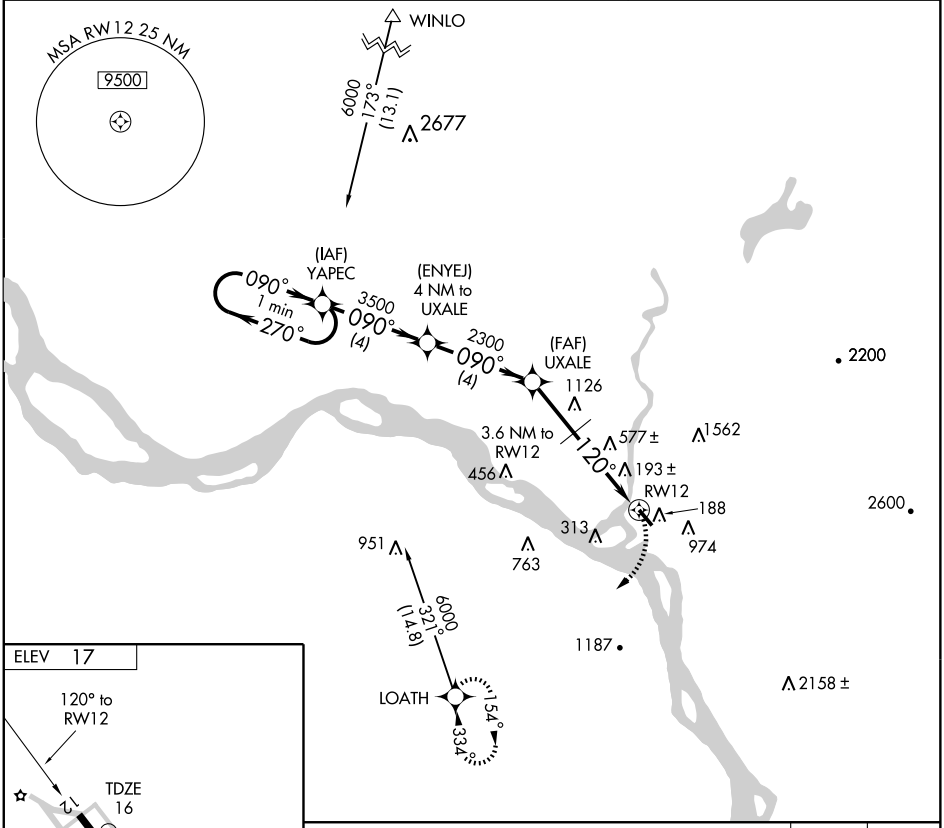
GPS RWY 12

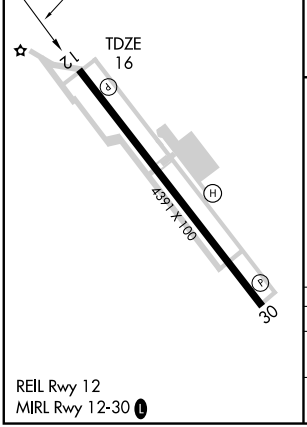
SOUTHWEST WASHINGTON RGNL (KLS)

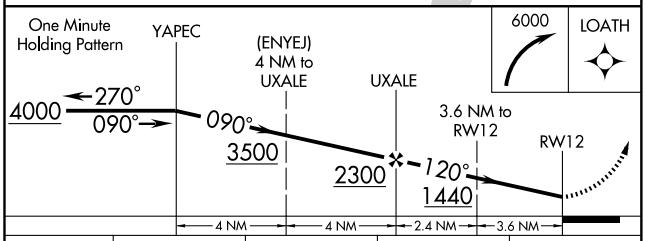
NA — Circling not authorized northeast of Rwy 12-30.

MISSED APPROACH: Climbing right turn to 6000 direct LOATH WP and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.075	124.2 317.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	960-1¼ 944 (1000-1¼)		NA	
CIRCLING	960-1¼ 943 (1000-1¼)		NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB LSO 256	APP CRS 149°	Rwy Idg N/A TDZE N/A Apt Elev 17

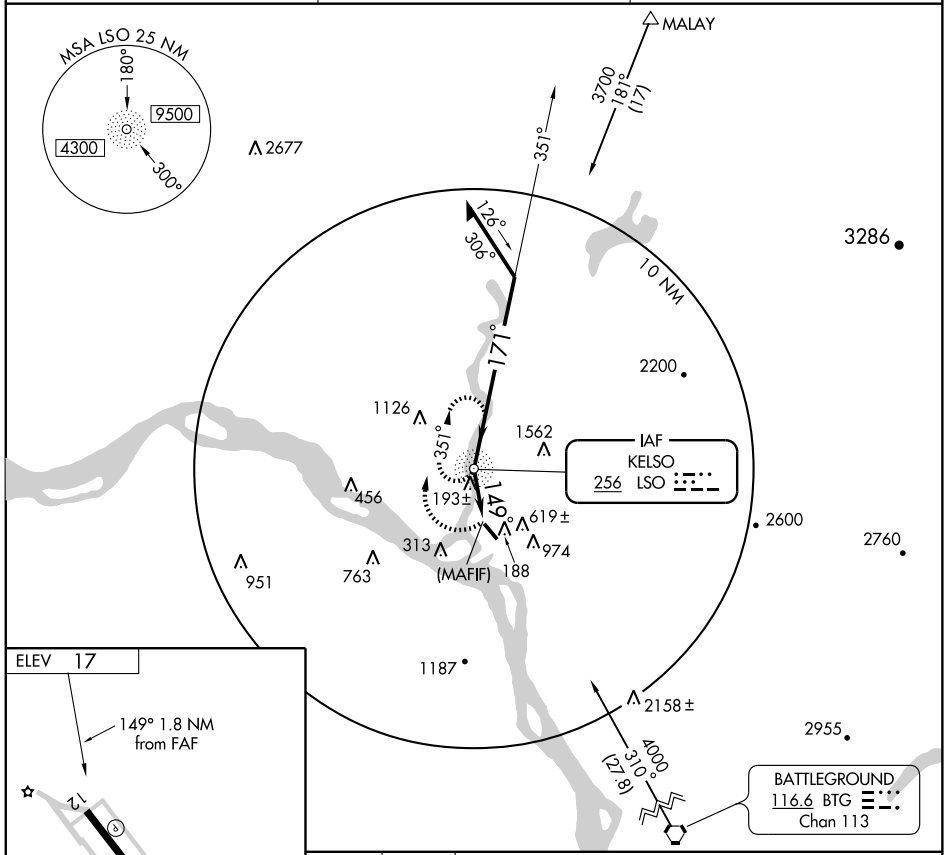
NDB or GPS-A

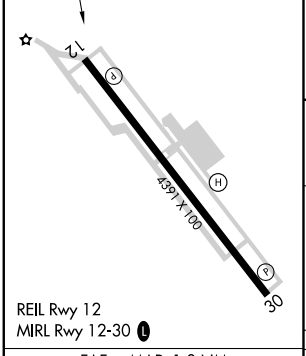
SOUTHWEST WASHINGTON RGNL (KLS)

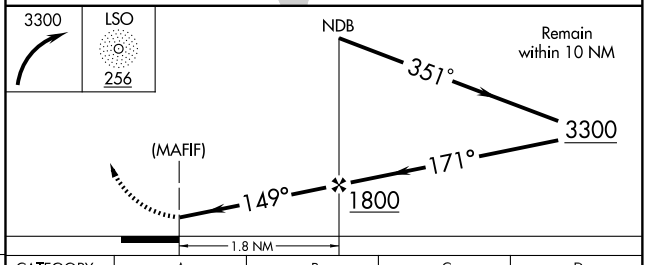
NA Circling not authorized northeast of Rwy 12-30.

MISSED APPROACH: Climbing right turn to 3300 direct LSO NDB and hold.

AWOS-3	SEATTLE CENTER	UNICOM
135.075	124.2 317.6	122.8 (CTAF) L







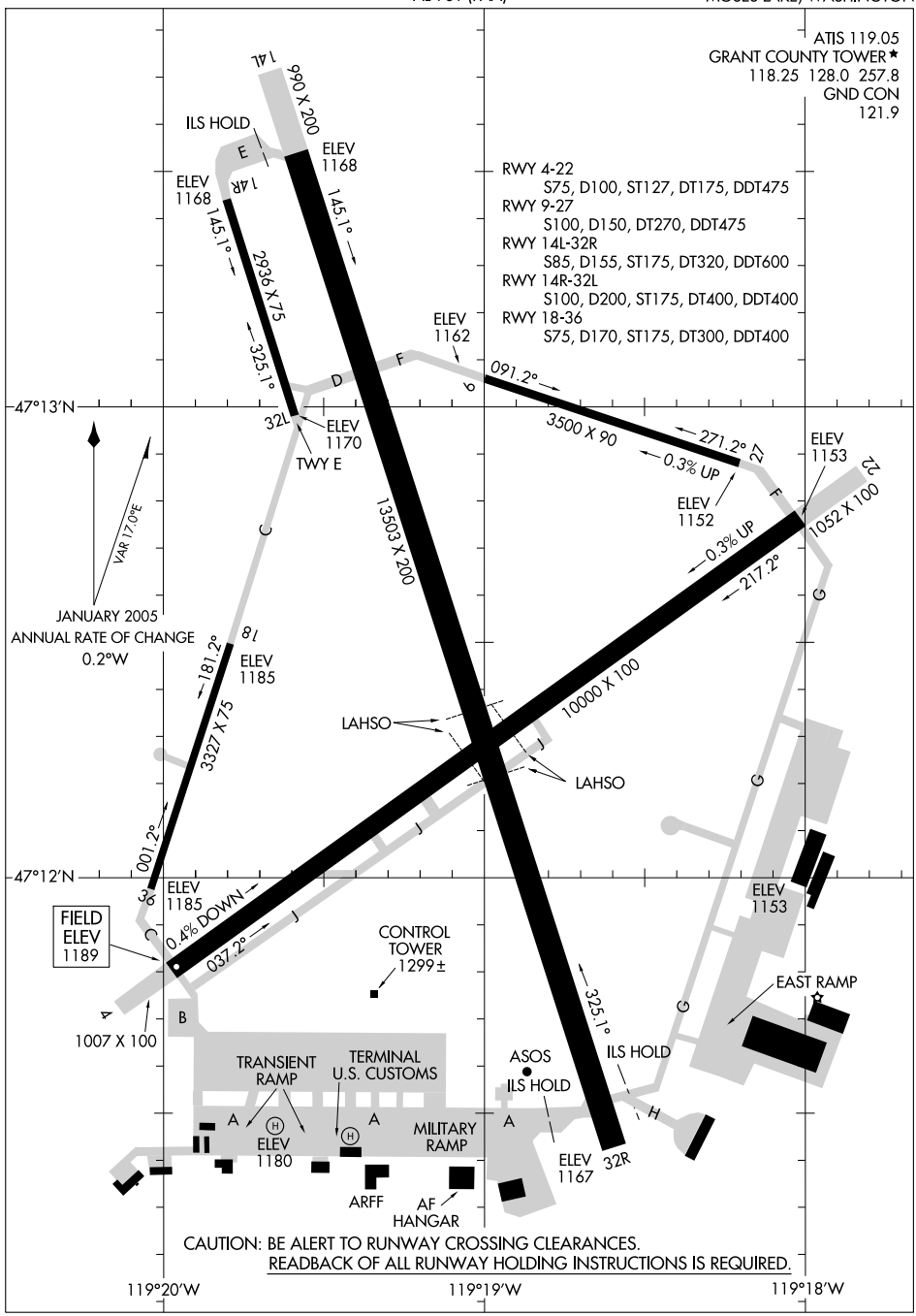
FAF to MAP 1.8 NM					
Knots	60	90	120	150	180
Min:Sec	1:48	1:12	0:54	0:43	0:36

CATEGORY	A	B	C	D
CIRCLING	1120-1¼ 1103 (1200-1¼)	1120-1½ 1103 (1200-1½)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

MOSES LAKE/GRANT COUNTY INTL (MWH)
AL-961 (FAA)
MOSES LAKE, WASHINGTON



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-MWH	APP CRS	Rwy Idg	13503
109.5	324°	TDZE	1167
		Apt Elev	1189

ILS or LOC RWY 32R

MOSES LAKE/ GRANT COUNTY INTL (MWH)

For inoperative MALSR, increase S-LOC 32R Cat. D visibility to RVR 5000.
If local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDAs 40 feet.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1800, then climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold, continue climb-in-hold to 4000.

ATIS	GRANT COUNTY APP CON *	GRANT COUNTY TOWER *	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) L 128.0 257.8	121.9	122.95

ADF OR DME REQUIRED

EPHRATA 112.6 EPH Chan 73

WIPES

3900 183° (19.1)

3700 to LOM 138° (16.9)

R-096

2420

2534

BATUM MWH 9.8

234° 054°

LOCALIZER 109.5 I-MWH

MOSES LAKE 115.0 MWH Chan 97

R-054

3800 203° (11.6)

1492±

1191

3500 145° (6)

QUINT

PLUSS

4300 084° (26.6)

3500 089° (11.8)

1290±

LOM/IAF PELLY 408 MW

MWH 6

1357

3900 053° (15.7)

RUBEL

10 NM

324°

144°

099°

279°

ALTERNATE MISSED APCH FIX

R-315 135° 315°

EPHRATA EPH 112.6 Chan 73

MSA MW 25 NM

170° 4200 3300 350°

ELEV 1189

MIRL Rwys 4-22, 14R-32L, and 18-36
HIRL Rwy 14L-32R
REIL Rwys 4,14L and 22

14L 14R 32L 13503 X 200 3500 X 90 0.3% UP 27 22 18 3327 X 75 0.4% DOWN 10000 X 100 36 1299± 1281 1301±

32R TDZE 1167

324° 4.7 NM from FAF

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

1800 4000 MWH R-054 BATUM

VGSI and ILS glide path not coincident.

LOM MWH 6

Remain within 10 NM

144° 2748 3300 324° 2800

MWH 1.3

GS 3.00° TCH 55

4.7 NM

CATEGORY	A	B	C	D
S-ILS 32R	*1367/24 200 (200-½)			
S-LOC 32R	1440/24 273 (300-½)			1440/40 273 (300-¾)
CIRCLING	1680-1 491 (500-1)		1680-1½ 491 (500-1½)	1740-2 551 (600-2)

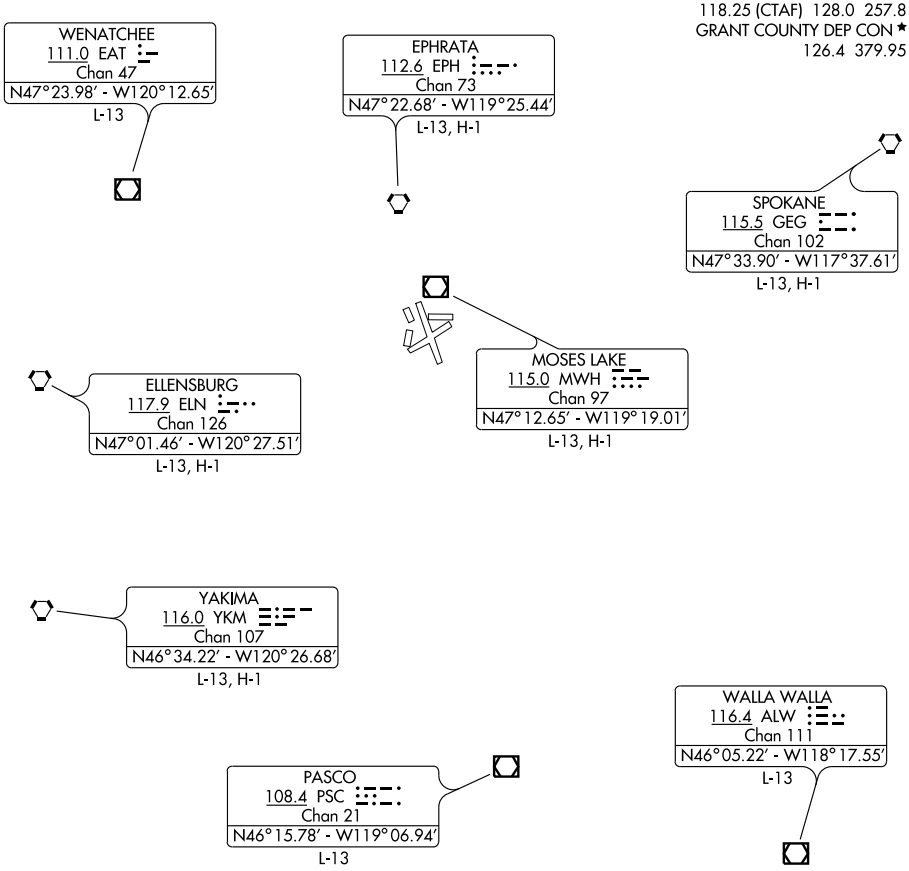
NW-1, 14 JAN 2010 to 11 FEB 2010

MOSES THREE DEPARTURE

SL-961 (FAA)

MOSES LAKE/GRANT COUNTY INTL (MWH)
MOSES LAKE, WASHINGTON

ATIS 119.05
GND CON
121.9
GRANT COUNTY TOWER ★
118.25 (CTAF) 128.0 257.8
GRANT COUNTY DEP CON ★
126.4 379.95



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Fly runway heading, or ATC assigned heading, for vector to assigned route/fix. Maintain 5000′ or ATC assigned altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for 1 minute after departure, maintain runway heading, or ATC assigned heading to 6000′, then climbing right turn to filed altitude, direct MWH VOR/DME, then via assigned fix/route.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM MW	APP CRS	Rwy Idg	13503
408	324°	TDZE	1164
		Apt Elev	1185

NDB RWY 32R

MOSES LAKE/GRANT COUNTY INTL (MWH)

MALSR

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95

EPHRATA 112.6 EPH Chan 73

MOSES LAKE 115.0 MWH Chan 97

WIPES

BATUM MWH 9.8

2420

2534

3600 to LOM 138° (16.9)

R-096

3800 183° (19.1)

234°

054°

R-054

3700 203° (11.6)

1492± ∧

3400 145° (6)

QUINT

PLUSS

4200 085° (26.6)

3400 089° (11.8)

LOM/IAF PELLY 408 MW

1357

3900 053° (15.7)

RUBEL

324°

099°

279°

144°

10 NM

MSA MW 25 NM

170°

4000

3300

350°

NW-1, 14 JAN 2010 to 11 FEB 2010

4000 MWH R-054

BATUM

LOM

Remain within 10 NM

144°

2800

324°

2600

4.7 NM

ELEV 1185

MIRL Rwys 4-22, 14R-32L, and 18-36

HIRL Rwy 14L-32R

REIL Rwys 4, 14L and 22

14R

2936 X 75

32L

3500 X 90

0.3% UP

12

22

13503 X 200

0.3% UP

18

3327 X 75

10000 X 100

0.4% DOWN

36

1299±

1281

1301±∧

TDZE 1164

32R

324° 4.7 NM from FAF

CATEGORY	A	B	C	D
S-32R	1680/40	516 (500-¾)	1680/50 516 (500-1)	1680-1½ 516 (500-1½)
CIRCLING	1680-1	495 (500-1)	1680-1½ 495 (500-1½)	1740-2 555 (600-2)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

WAAS CH 42809 W04A	APP CRS 036°	Rwy Idg 10000 TDZE 1189 Apt Elev 1189

RNAV (GPS) RWY 4

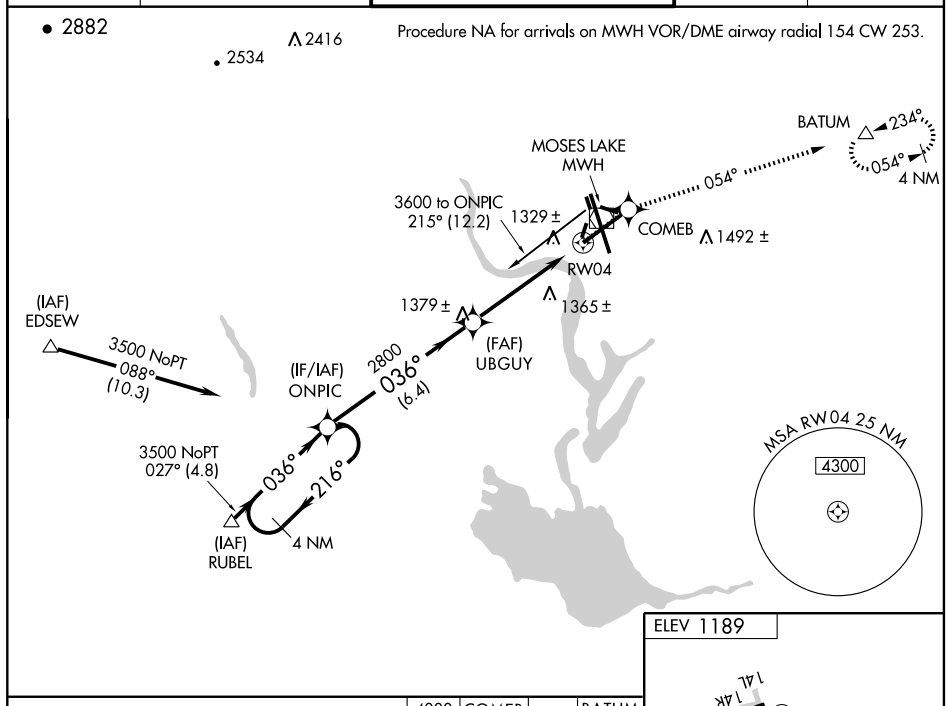
MOSES LAKE/ GRANT COUNTY INTL (MWH)

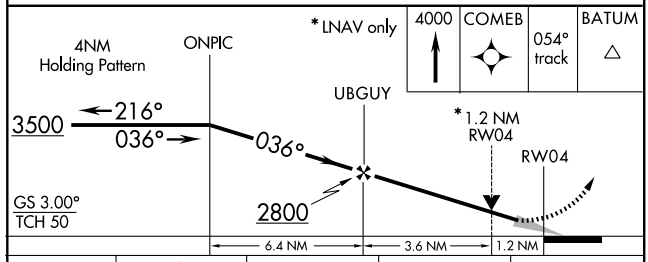
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LPV all Cats and LNAV/VNAV all Cats visibility ¼ mile. Baro-VNAV and VDP NA when using Ephrata altimeter setting.

MISSED APPROACH: Climb to 4000 direct COMEB and via 054° track to BATUM and hold, continue climb-in-hold 4000.

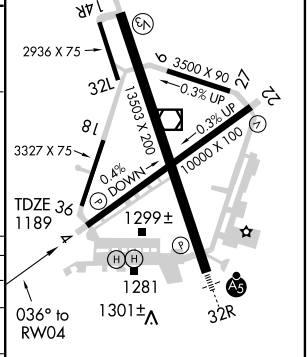
ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) L 128.0 257.8	121.9	122.95

Procedure NA for arrivals on MWH VOR/DME airway radial 154 CW 253.





CATEGORY	A	B	C	D
LPV DA	1439-¾ 250 (300-¾)			
LNAV/ VNAV DA	1636-1½ 447 (500-1½)			
LNAV MDA	1620-1 431 (500-1)		1620-1¼ 431 (500-1¼)	1620-1½ 431 (500-1½)
CIRCLING	1660-1 471 (500-1)		1660-1½ 471 (500-1½)	1740-2 551 (600-2)



REIL Rwys 4, 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22, 14R-32L, and 18-36

WAAS CH 90509 W14A	APP CRS 144°	Rwy Idg 13503 TDZE 1169 Apt Elev 1189

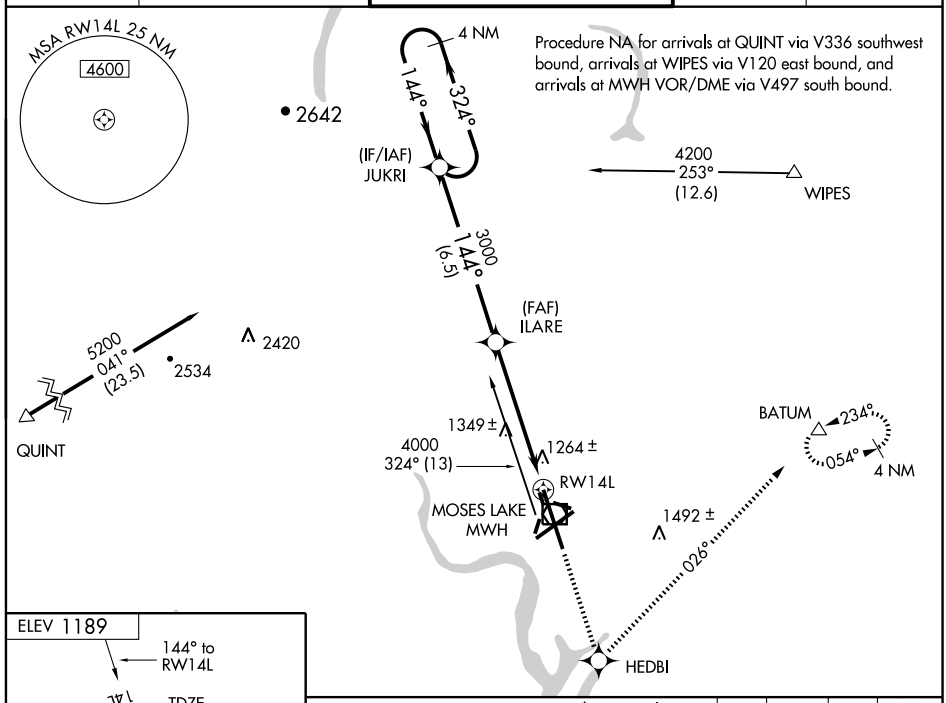
RNAV (GPS) RWY 14L

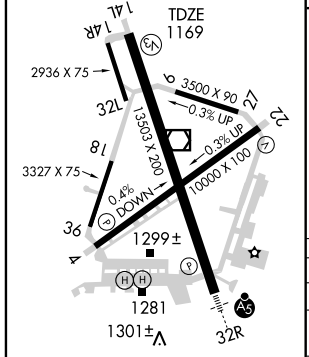
MOSES LAKE/ GRANT COUNTY INTL (MWH)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LPV all CATs and LNAV/VNAV all CATs visibility ¼ mile.

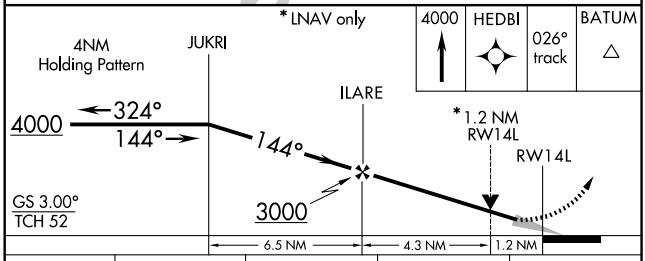
MISSED APPROACH: Climb to 4000 direct HEDBI and via 026° track to BATUM and hold, continue climb-in-hold 4000.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) L 128.0 257.8	121.9	122.95





REIL Rwys 4, 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22, 14R-32L, and 18-36



CATEGORY	A	B	C	D
LPV DA	1419-¾ 250 (300-¾)			
LNAV/ VNAV DA	1622-1½ 453 (500-1½)			
LNAV MDA	1600-1 431 (500-1)		1600-1¼ 431 (500-1¼)	1600-1½ 431 (500-1½)
CIRCLING	1660-1 471 (500-1)		1660-1½ 471 (500-1½)	1740-2 551 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 70410 W22A	APP CRS 216°	Rwy ldg 10000 TDZE 1166 Apt Elev 1189

RNAV (GPS) RWY 22

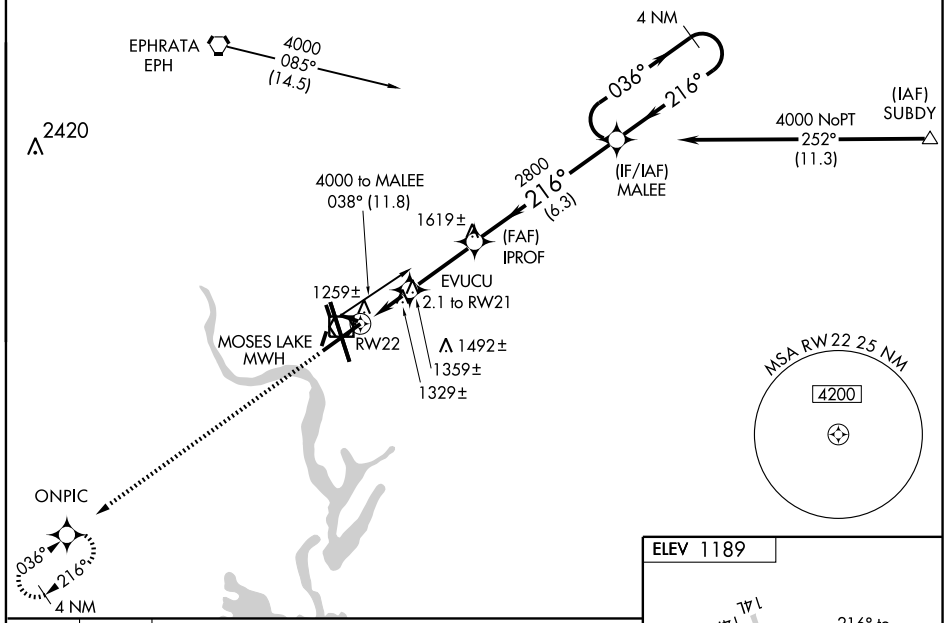
MOSES LAKE/ GRANT COUNTY INTL (MWH)

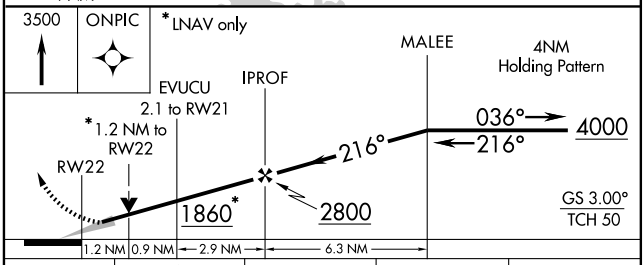
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet and increase LNAV/VNAV all Cats and LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3500 direct ONPIC and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95

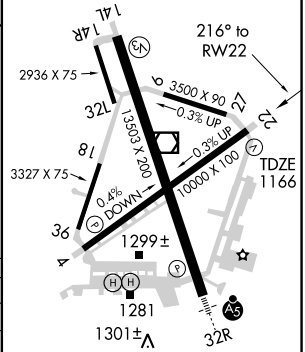
Procedure NA for arrivals at EPH VORTAC via V120 westbound.





CATEGORY	A	B	C	D
LPV DA	1416-1 250 (300-1)			
LNAV/ VNAV DA	1529-1¼ 363 (400-1¼)			
LNAV MDA	1580-1 414 (500-1)		1580-1¼ 414 (500-1¼)	
CIRCLING	1660-1 471 (500-1)		1660-1½ 471 (500-1½)	1740-2 551 (600-2)

ELEV 1189



REIL Rwys 4, 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22, 14R-32L, and 18-36

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	13503
CH 77799	324°	TDZE	1164
W32A		Apt Elev	1185

RNAV (GPS) RWY 32R

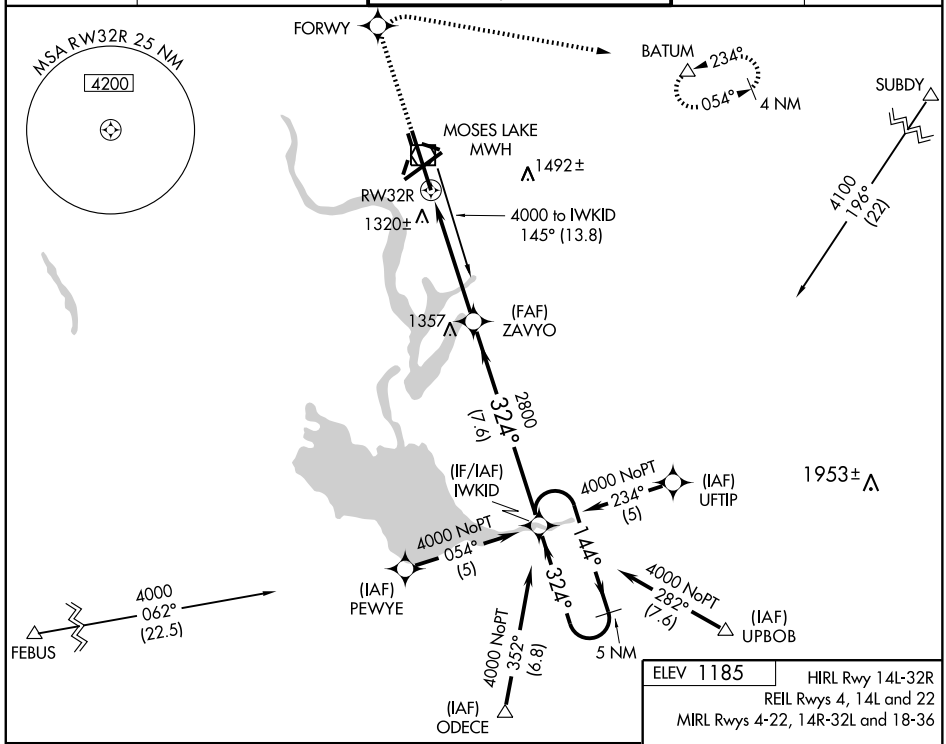
MOSES LAKE/GRANT COUNTY INTL (MWH)

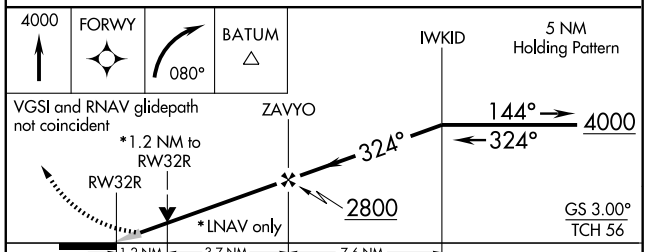
DME/DME RNP-0.3 NA. Baro-VNAV NA below -17°C (1°F). For inoperative MALSR increase LPV all Cats visibility to RVR 4000, and LNAV Cat D visibility to 1½.

MALSR

MISSED APPROACH: Climb to 4000 direct FORWY and right turn via 080° track to BATUM and hold, continue climb-in-hold to 4000.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95

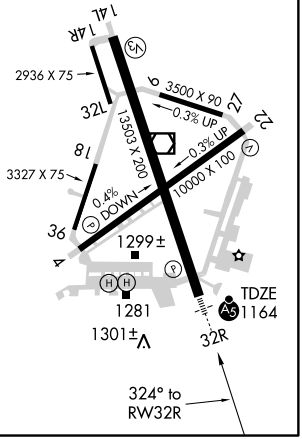




CATEGORY	A	B	C	D
LPV DA	1414/24 250 (300-½)			
LNAV/VNAV DA	1667/60 503 (500-1¼)			
LNAV MDA	1620/24 456 (500-½)		1620/40 456 (500-¾)	1620/50 456 (500-1)
CIRCLING	1680-1¾ 495 (500-1¾)			1740-2 555 (600-2)

ELEV 1185

HIRL Rwy 14L-32R
REIL Rwys 4, 14L and 22
MIRL Rwys 4-22, 14R-32L and 18-36



NW-1, 14 JAN 2010 to 11 FEB 2010

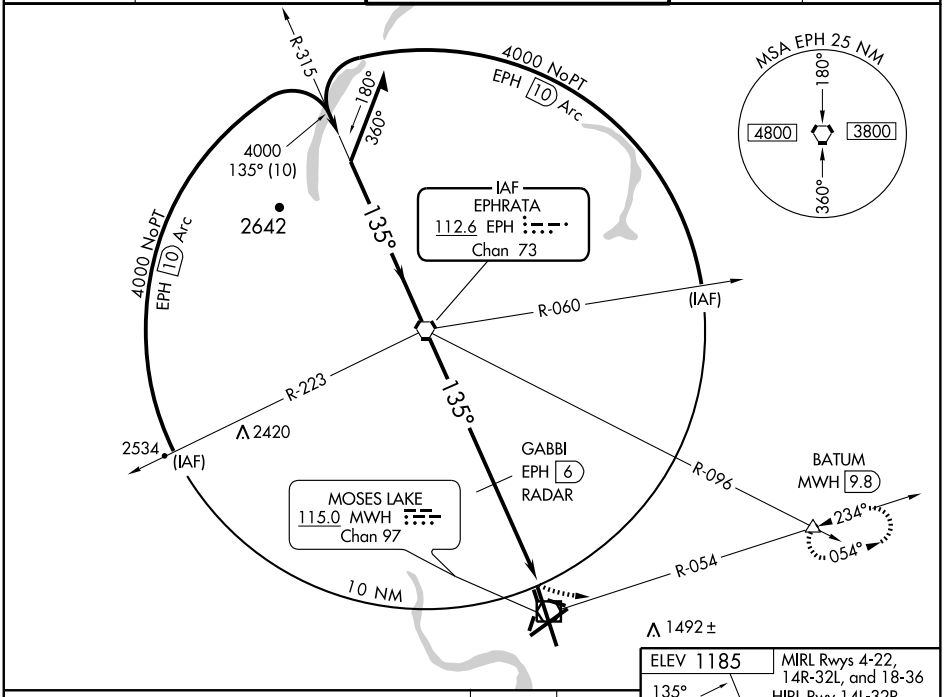
VORTAC EPH	APP CRS	Rwy Idg	13503
112.6	135°	TDZE	1166
Chan 73		Apt Elev	1185

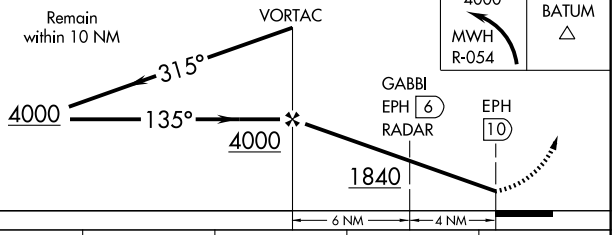
VOR-1 RWY 14L

MOSES LAKE/GRANT COUNTY INTL (MWH)

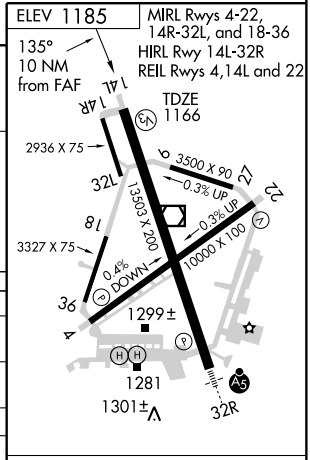
MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95





CATEGORY	A	B	C	D
S-14L	1840-1 674 (700-1)		1840-2 674 (700-2)	1840-2¼ 674 (700-2¼)
CIRCLING	1840-1 655 (700-1)		1840-1¾ 655 (700-1¾)	1840-2 655 (700-2)
GABBI DME or RADAR MINIMUMS				
S-14L	1640-1 474 (500-1)		1640-1¼ 474 (500-1¼)	1640-1½ 474 (500-1½)
CIRCLING	1680-1 495 (500-1)		1680-1½ 495 (500-1½)	1740-2 555 (600-2)



FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

NW-1, 14 JAN 2010 to 11 FEB 2010

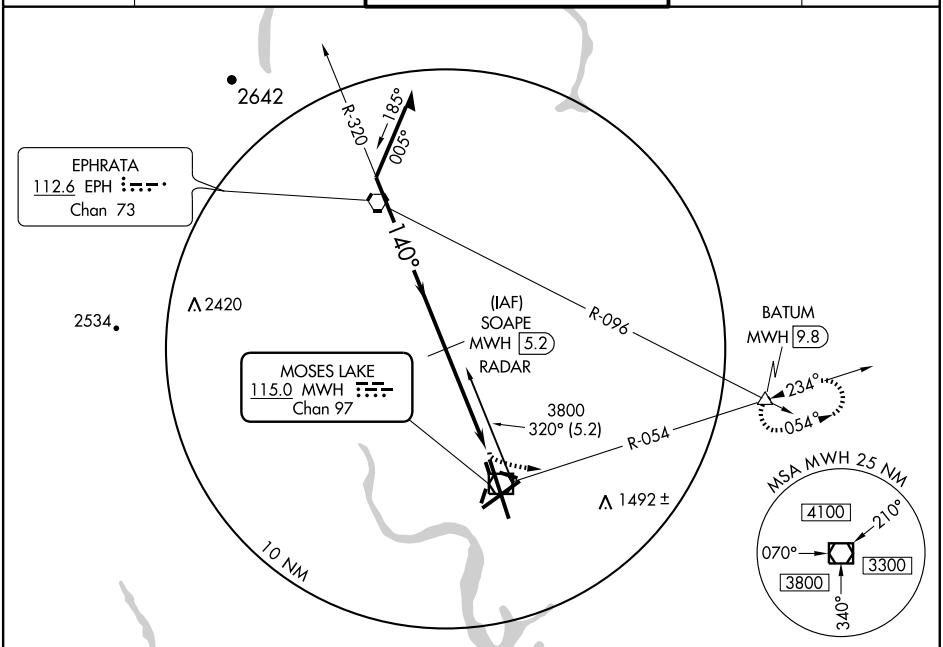
VOR/DME MWH	APP CRS	Rwy Idg	13503
115.0	140°	TDZE	1166
Chan 97		Apt Elev	1185

VOR-3 RWY 14L

MOSES LAKE/ GRANT COUNTY INTL (MWH)

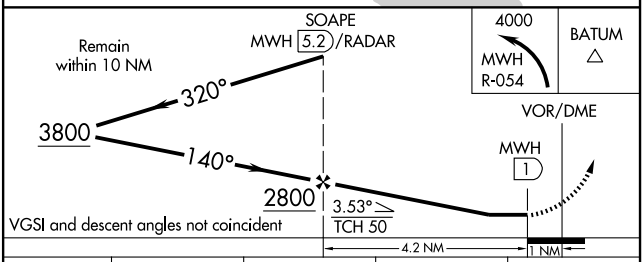
MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

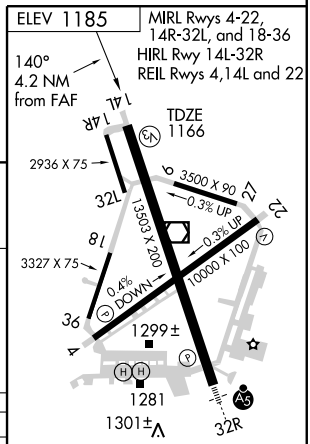
ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95



NW-1, 14 JAN 2010 to 11 FEB 2010

RADAR or DME REQUIRED





CATEGORY	A	B	C	D
S-14L	1620-1 454 (500-1)		1620-1¼ 454 (500-1¼)	1620-1½ 454 (500-1½)
CIRCLING	1680-1 495 (500-1)		1680-1½ 495 (500-1½)	1740-2 555 (600-2)

FAF to MAP 4.2 NM

Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

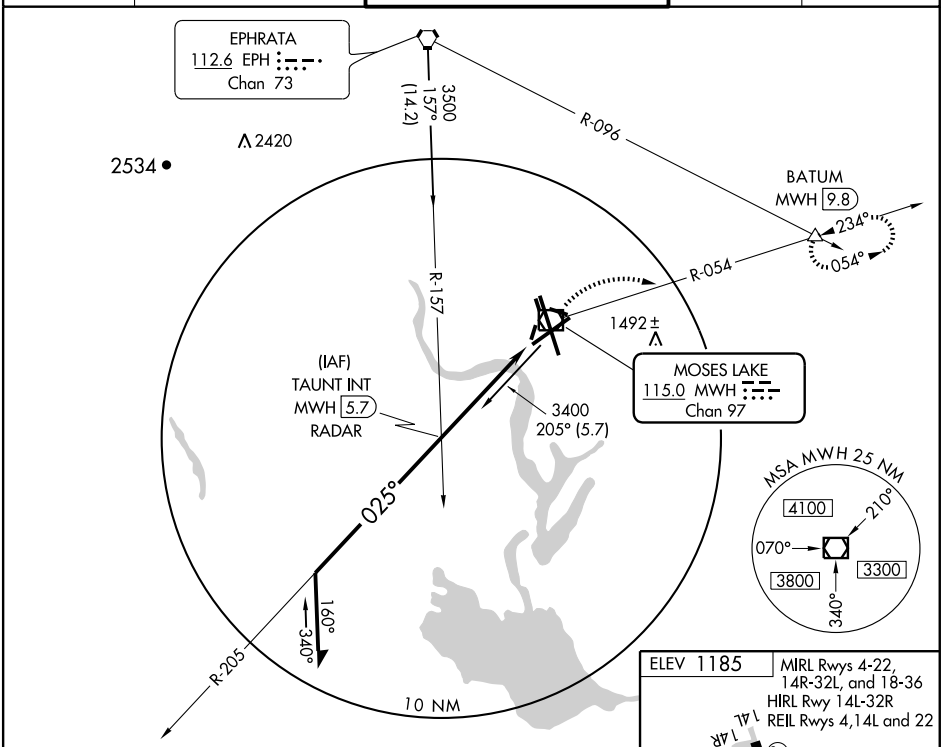
VOR/DME MWH	APP CRS	Rwy Idg	10000
115.0	025°	TDZE	1185
Chan 97		Apt Elev	1185

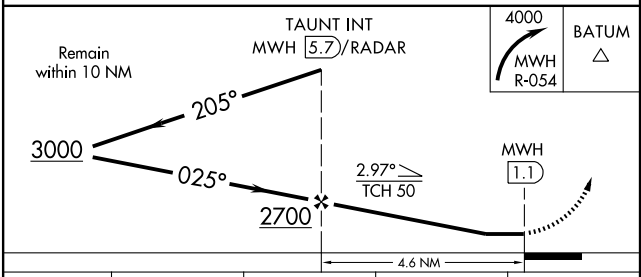
VOR RWY 4

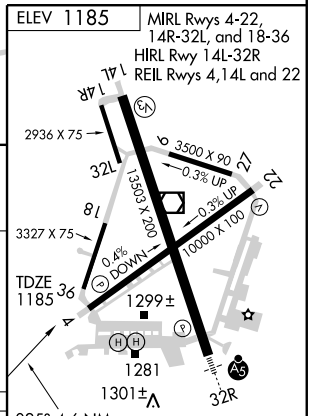
MOSES LAKE/GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-4	1620-1	435 (500-1)	1620-1¼ 435 (500-1¼)	1620-1½ 435 (500-1½)
CIRCLING	1680-1	495 (500-1)	1680-1½ 495 (500-1½)	1740-2 555 (600-2)

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

NW-1, 14 JAN 2010 to 11 FEB 2010

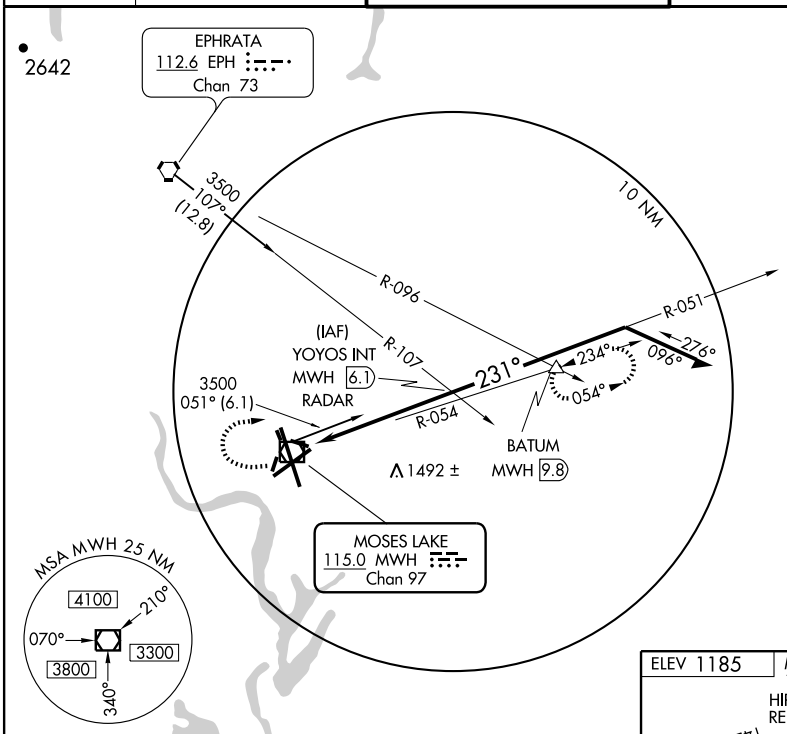
VOR/DME MWH	APP CRS	Rwy Idg	10000
115.0	231°	TDZE	1161
Chan 97		Apt Elev	1185

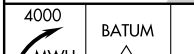
VOR RWY 22

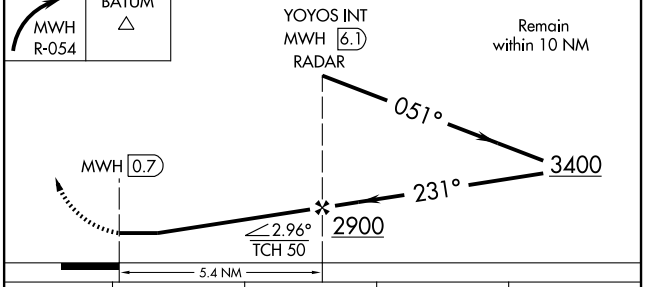
MOSES LAKE/GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95



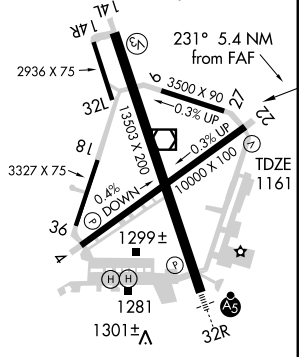




CATEGORY	A	B	C	D
S-22	1760-1 599 (600-1)		1760-1½ 599 (600-1½)	1760-1¾ 599 (600-1¾)
CIRCLING	1760-1 575 (600-1)		1760-1½ 575 (600-1½)	1760-2 575 (600-2)

ELEV 1185

MIRL Rwys 4-22, 14R-32L, and 18-36
HIRL Rwy 14L-32R
REIL Rwys 4,14L and 22



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME MWH 115.0 Chan 97	APP CRS 325°	Rwy Idg 13503 TDZE 1164 Apt Elev 1185

VOR RWY 32R

MOSES LAKE/ GRANT COUNTY INTL (MWH)

MALSR

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM Int/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 128.0 257.8	121.9	122.95

EPHRATA
112.6 EPH
Chan 73

WIPES
3900
197°
(14.8)

R-096

2420

2534

MOSES LAKE
115.0 MWH
Chan 97

BATUM
MWH 9.8
234°
054°

R-054

1492±

3400
145° (6)

1314±

1357

LOM/IAF
PELLY
408 MW
MWH 6

325°

100°
280°

R-145

10 NM

MSA MWH 25 NM
4100
210°
070°
3800
3300
340°

ADF or DME REQUIRED

4000
MWH
R-054

BATUM

PELLY LOM
MWH 6

Remain within 10 NM

145°
2800
325°
2600

VOR/DME

1.3
4.7 NM

ELEV 1185

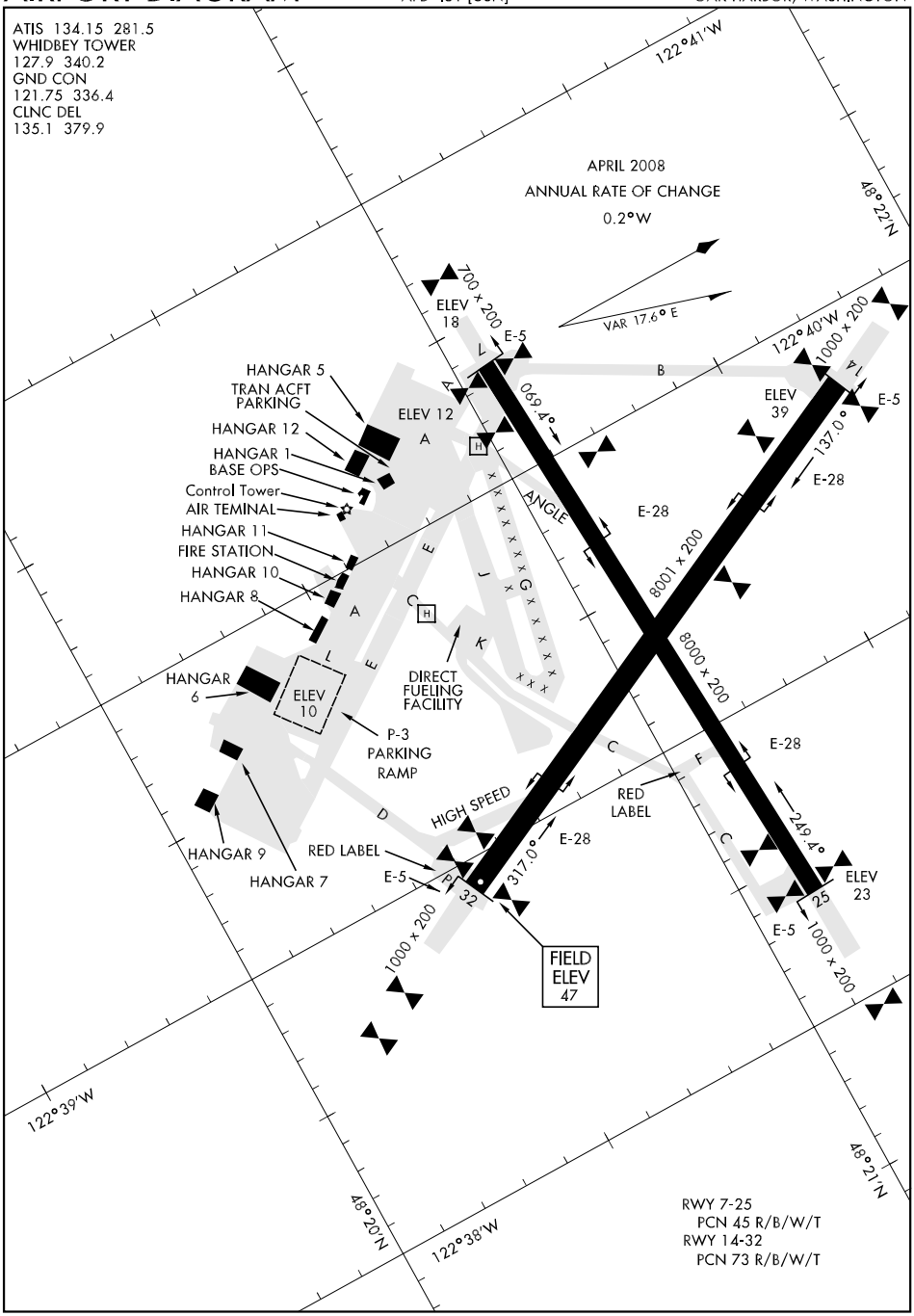
14L
4R
2936 X 75
32L
3500 X 90
0.3% UP
13503 X 200
0.3% UP
10000 X 100
18
3327 X 75
0.4% DOWN
36
1299±
1281
1301±
TDZE
1164
32R
27
22

325° 4.7 NM from FAF

REIL Rwys 4,14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22, 14R-32L, and 18-36

CATEGORY	A	B	C	D
S-32R	1620/24	456 (500-½)	1620/40 456 (500-¾)	1620/50 456 (500-1)
CIRCLING	1680-1	495 (500-1)	1680-1½ 495 (500-1½)	1740-2 555 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010



NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 7

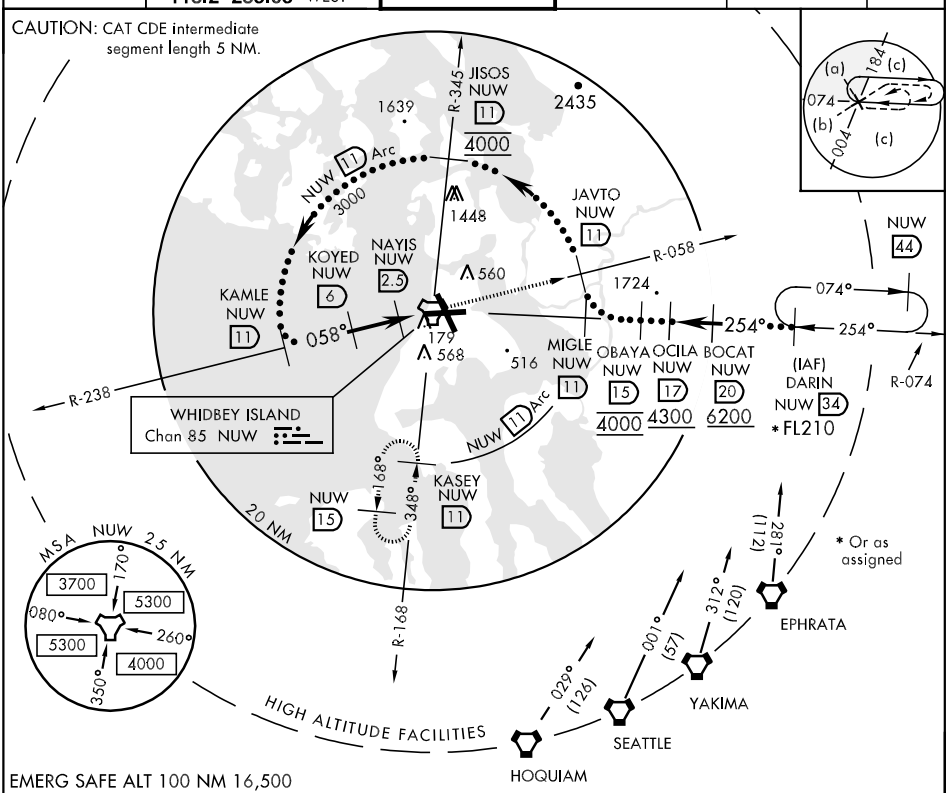
TACAN	APCH CRS	Rwy ldg	8000
NUW Chan 85	058°	TDZE	25
		Arpt Elev	47

JAL-451 [USN] WHIDBEY ISLAND NAS (AULT FLD) (NUW)

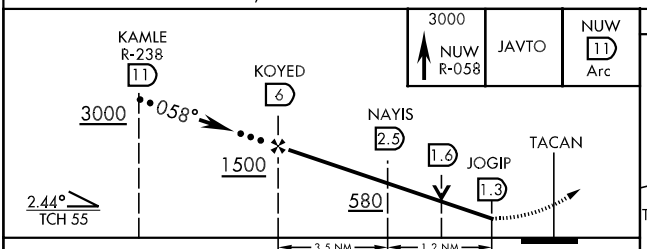
MISSED APPROACH: Climb to 3000 via R-058 to JAVTO, then arc SE of NUW TACAN via 11 DME Arc to KASEY and hold.

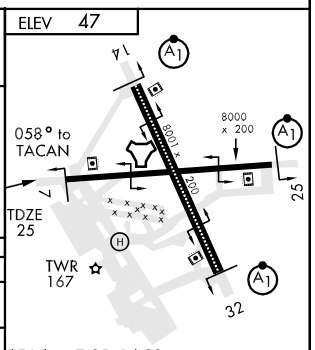
ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CDE intermediate segment length 5 NM.



EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-7	440-1¼ 415 (400-1¼)		440-1½ 415 (400-1½)
CIRCLING	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)
S-PAR 7	125-½ 100 (100-½) GS 3.00°		

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 14

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
NUW Chan 85	141°	8001	39	47

JAL-451 [USN] WHIDBEY ISLAND NAS (AULT FLD) (NUW)

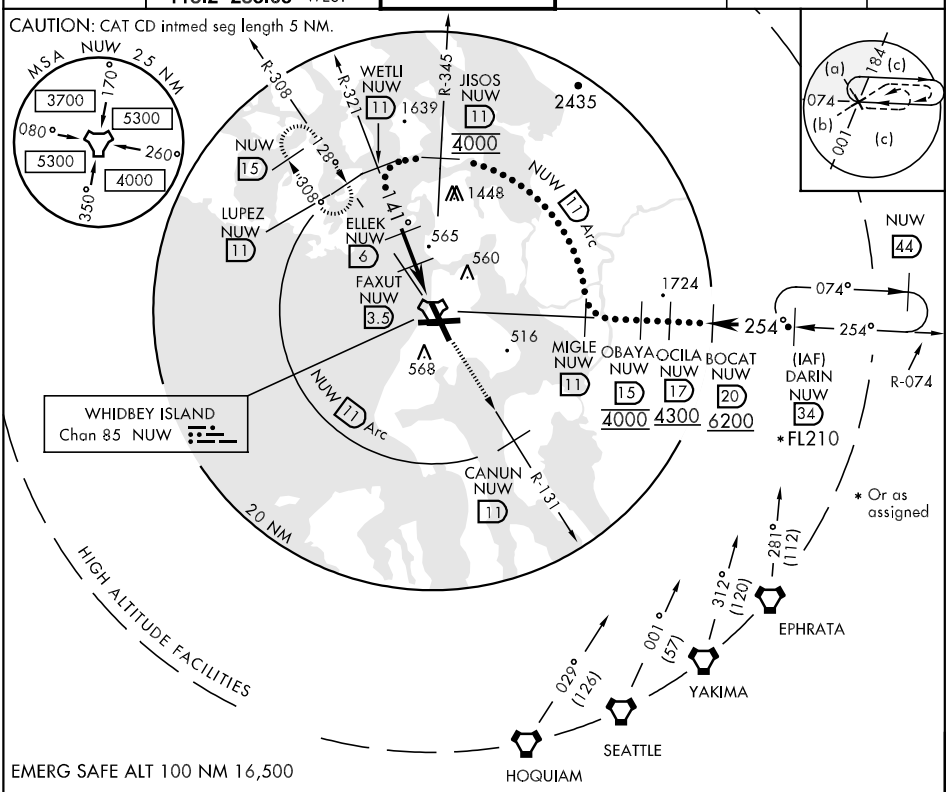
▼ * When ALS inop, increase vis CAT C to 1½ miles, CAT D to 1¾ miles, CAT E to 2 miles.
** When ALS inop, increase PAR CAT CDE to ½ mile.

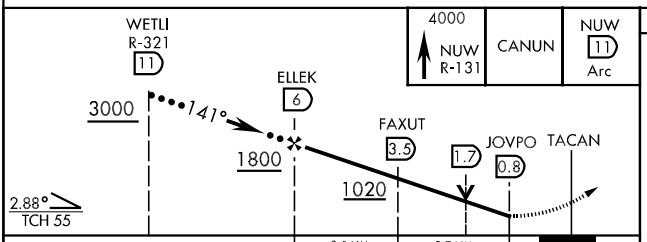
ALSF-1

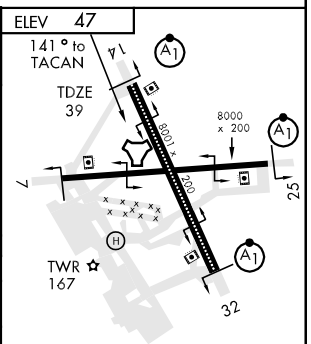
MISSED APPROACH: Climb to 4000 via R-131 to CANUN, then arc SW of NUW TACAN via 11 DME Arc to LUPEZ and hold.

ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CD intmed seg length 5 NM.







CATEGORY	C	D	E
S-14 *	620-1 581 (600-1)	620-1¼ 581 (600-1¼)	620-1½ 581 (600-1½)
CIRCLING	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)
S-PAR 14**	139-¼ 100 (100-¼) GS 3.00°		

REIL Rwy 7-25, 14-32
TDZ/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 25

TACAN	APCH CRS	Rwy ldg	8000
NUW Chan 85	254°	TDZE	28
		Arpt Elev	47

JAL-451 [USN] WHIDBEY ISLAND NAS (AULT FLD) (NUW)

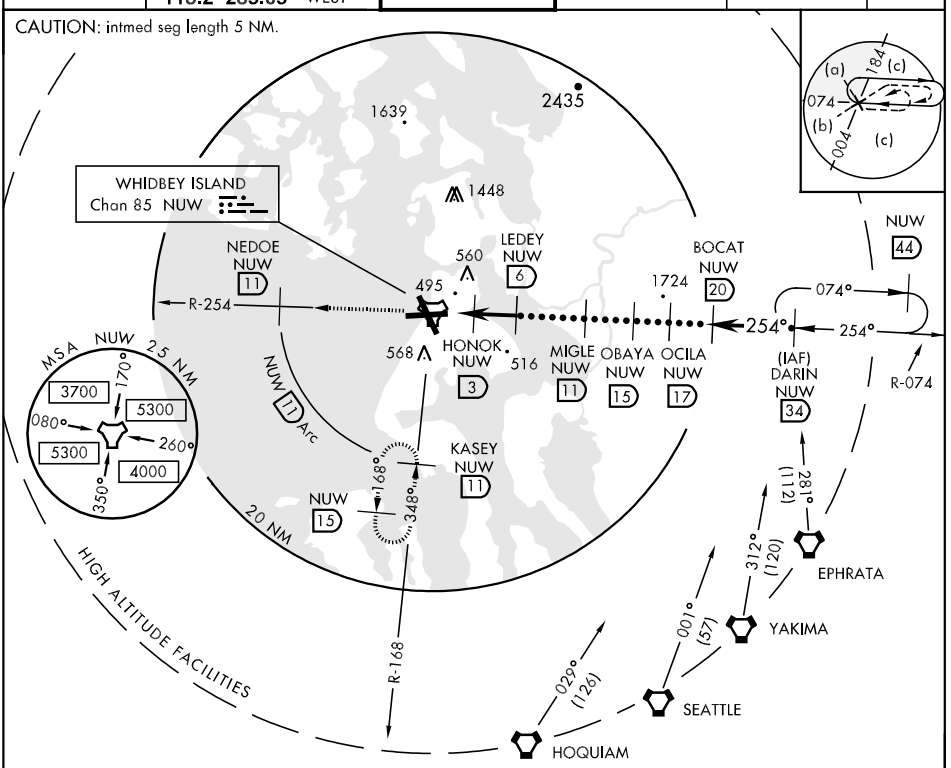
▼ * When ALS inop, increase vis CAT C to 2 miles, CAT D to 2¼ miles, CAT E to 2½ miles.
** When ALS inop, increase vis CAT CDE to ¾ miles.

ALSF-1

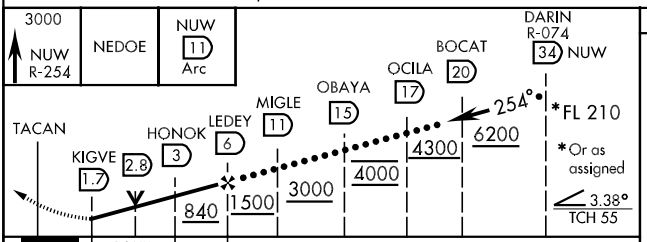
MISSED APPROACH: Climb to 3000 via R-254 to NEDOE, then arc SW of NUW TACAN via 11 DME Arc to KASEY and hold.

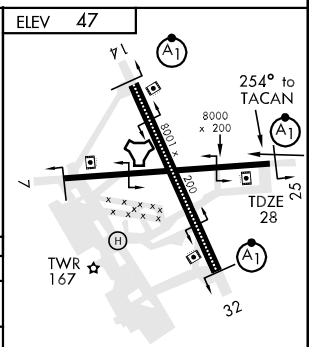
ATIS	WHIDBEY APP CON		WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8	EAST	127.9 340.2	121.75 336.4	135.1 379.9	
	118.2 285.65	WEST				

CAUTION: intmed seg length 5 NM.



EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-25*	760-1½	760-1¾	760-2
	732 (800-1½)	732 (800-1¾)	732 (800-2)
CIRCLING	800-2¼	860-2¾	1100-3
	753 (800-2¼)	813 (900-2¾)	1053 (1100-3)
S-PAR 25**	228-½ 200 (200-½) GS 3.00°		

REIL Rwy 7-25, 14-32
TDZ/CL Rwy 7-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 32

TACAN	APCH CRS	Rwy ldg	8001
NUW Chan 85	311°	TDZE	47
		Arpt Elev	47

JAL-451 [USN] WHIDBEY ISLAND NAS (AULT FLD) (NUW)

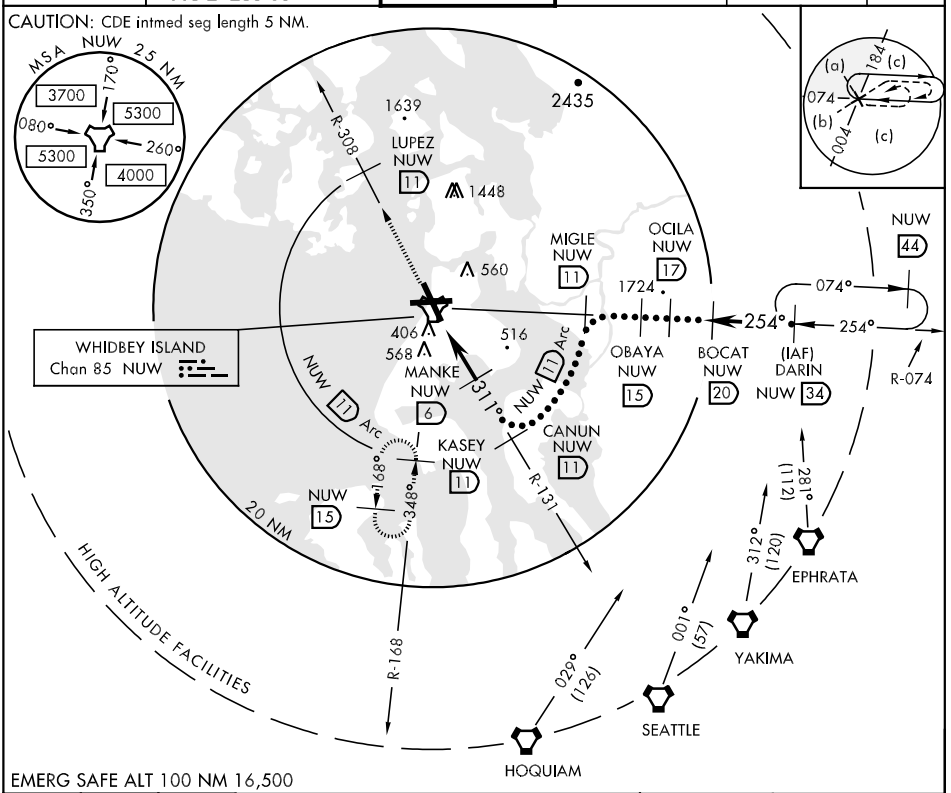
▼ * When ALS inop, increase vis CAT C to 1¾ miles, CAT D to 2 miles, CAT E to 2¼ miles.
** When ALS inop, increase vis CAT CDE to ¾ mile.

ALSF-1 (A1)

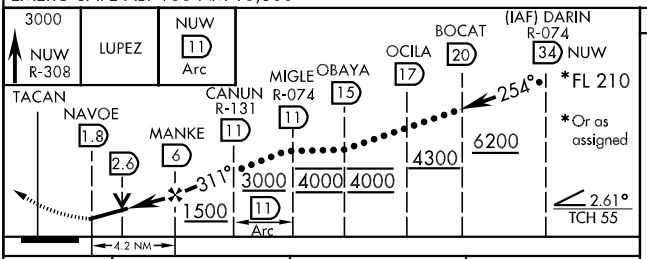
MISSED APPROACH: Climb to 3000 via R-308 to LUPEZ, then arc W of NUW TACAN via 11 DME Arc to KASEY and hold.

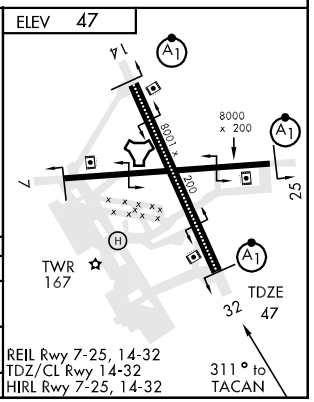
ATIS	WHIDBEY APP CON		WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8	EAST	127.9 340.2	121.75 336.4	135.1 379.9	
	118.2 285.65	WEST				

CAUTION: CDE intmed seg length 5 NM.



EMERG SAFE ALT 100 NM 16,500





CATEGORY	C	D	E
S-32*	660-1¼ 613 (700-1¼)	660-1½ 613 (700-1½)	660-1¾ 613 (700-1¾)
CIRCLING	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)
S-PAR 32**	247-½ 200 (200-½) GS 3.00°		

ILS Y or LOC/DME RWY 14

LOC I-NUW	APCH CRS	Rwy ldg 8001
110.1	137°	TDZE 39
		Arpt Elev 47

AL-451 [USN]

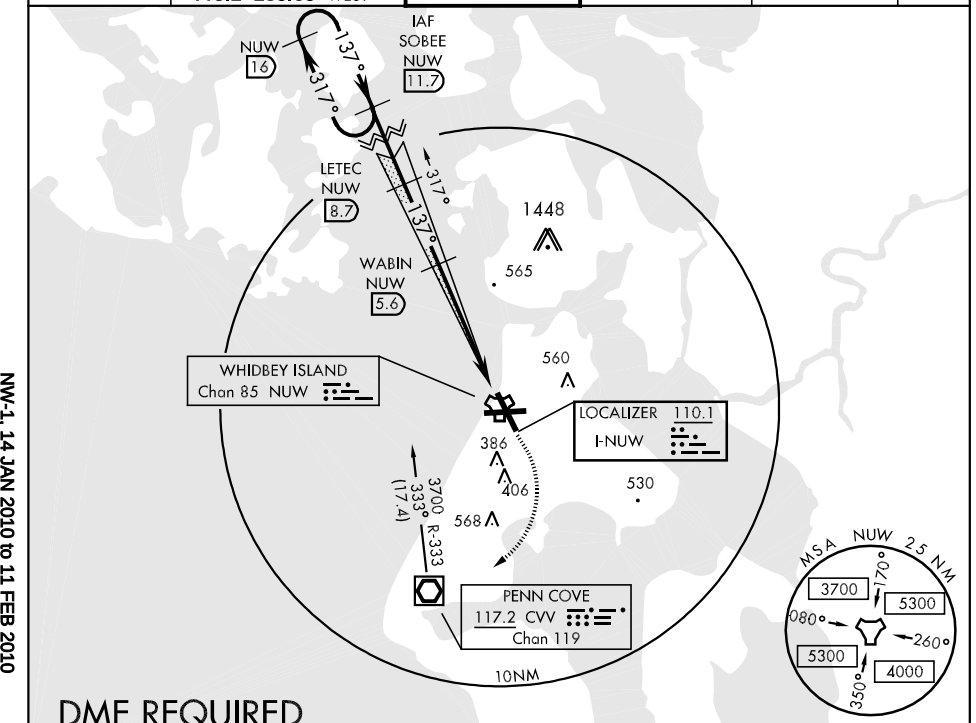
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

* When ALS inop, increase vis CAT ABCDE to ¾ mile.
** When ALS inop, increase vis CAT ABCDE to 1 mile.
*** When ALS inop, increase vis CAT ABCDE to ½ mile.

ALSF-1

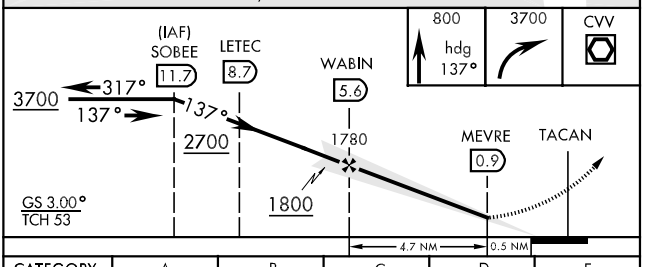
MISSED APPROACH: Climb to 800 via hdg 137°, then climbing right turn to 3700, direct CVV VOR/DME, then via CVV R-333 to SOBEE and hold.

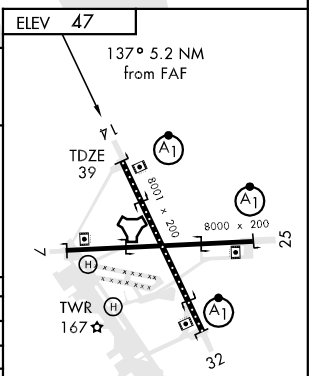
ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	



DME REQUIRED

EMERG SAFE ALT 100 NM 16,500





CATEGORY	A	B	C	D	E
S-ILS 14*	239-½ 200 (200-½)				
S-LOC 14**	300-½ 261 (300-½)		300-¾ 261 (300-¾)		
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)
S-PAR 14***	139-¼ 100 (100-¼) GS 3.0°				

48°21'N-122°39'W

ILS Z or RNAV (GPS) RWY 14

LOC I-NUW	APCH CRS	Rwy ldg 8001 TDZE 39 Arpt Elev 47
110.1	137°	

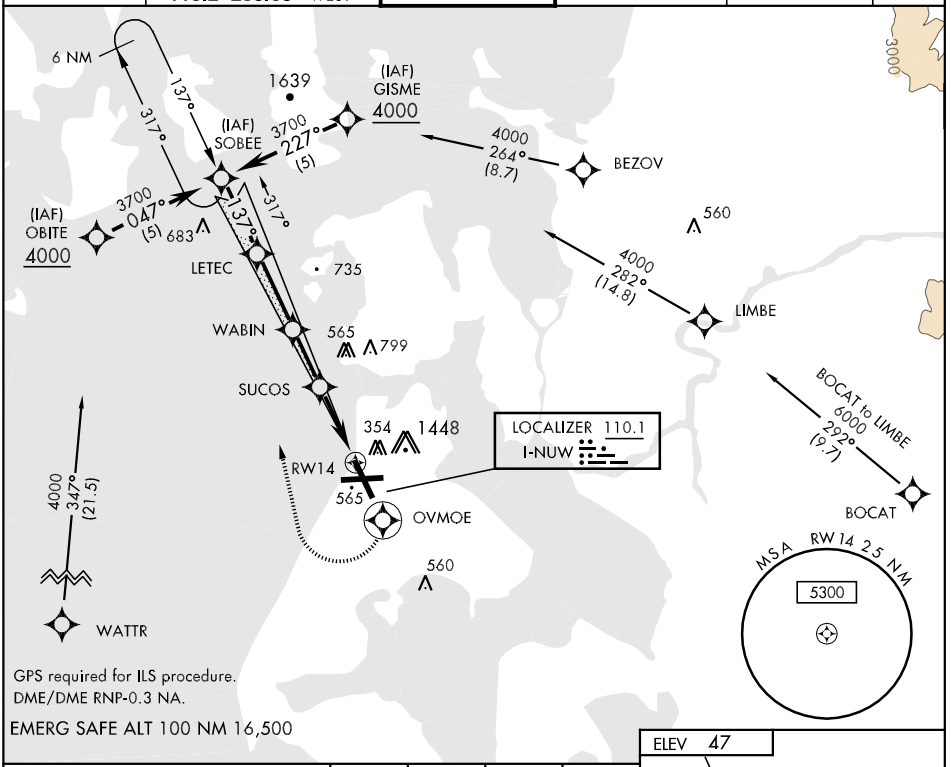
AL-451 [USN] — WHIDBEY ISLAND NAS (AULT FLD) (NUW)

* When ALS inop, increase vis ALL CAT to ¾ mile.
** When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

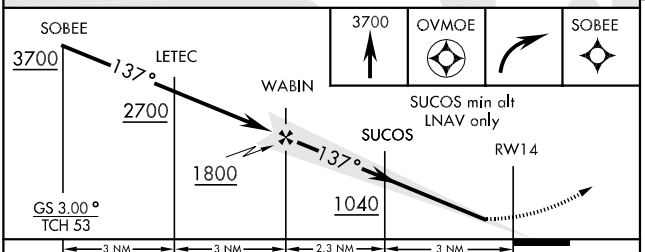
MISSED APPROACH: Climb to 3700 direct OVMOE, then climbing right turn direct SOBEE and hold.

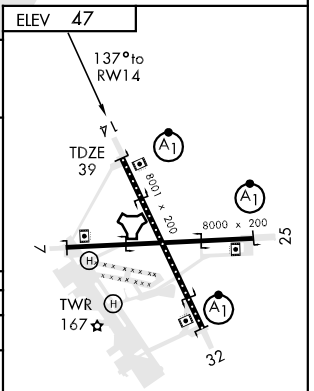
ATIS	WHIDBEY APP CON		WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8	EAST	127.9 340.2	121.75 336.4	135.1 379.9	
	118.2 285.65	WEST				



GPS required for ILS procedure.
DME/DME RNP-0.3 NA.

EMERG SAFE ALT 100 NM 16,500





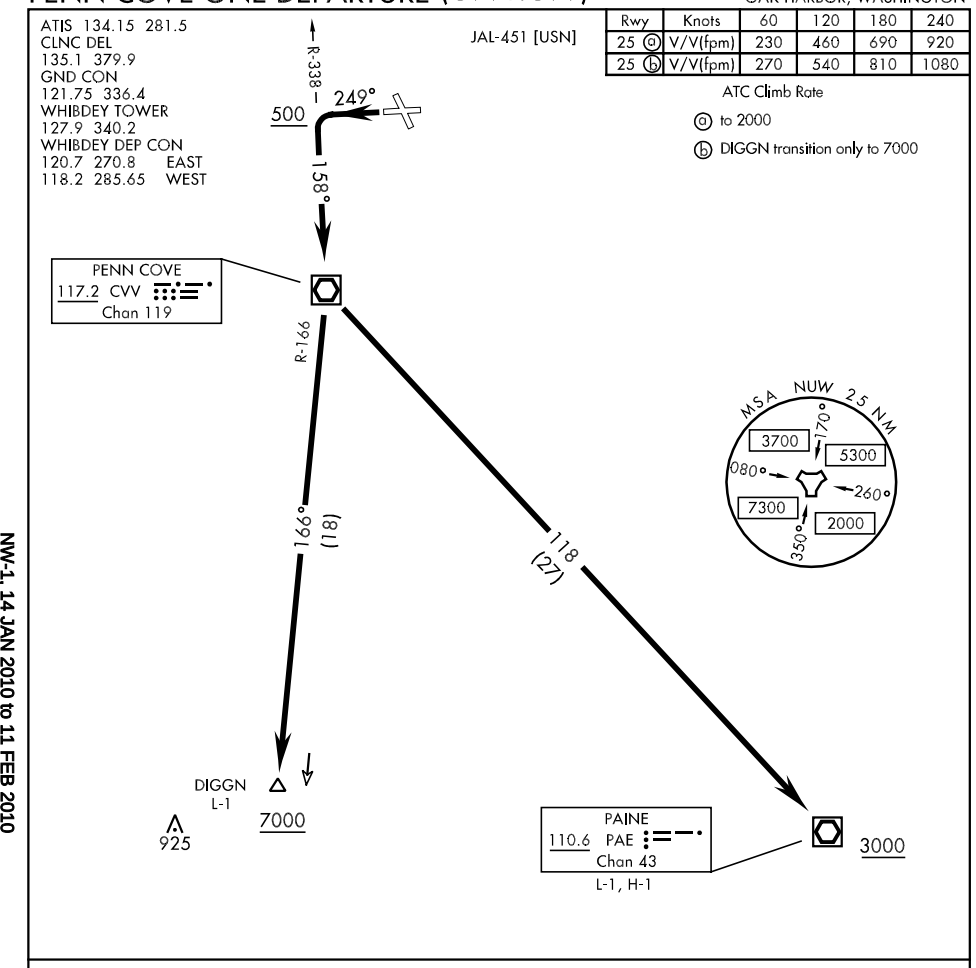
CATEGORY	A	B	C	D	E
S-ILS 14 *	239-½ 200 (200-½)				
LNAV MDA **	460-½ 421 (500-½)		460-¾ 421 (500-¾)	460- 1 421 (500-1)	460-1¼ 421 (500-1¼)
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

PENN COVE ONE DEPARTURE (CVV1.CVV)

OAK HARBOR, WASHINGTON



Rwy	Knots	60	120	180	240
25 ⓐ	V/V(fpm)	230	460	690	920
25 ⓑ	V/V(fpm)	270	540	810	1080

ATC Climb Rate

ⓐ to 2000

ⓑ DIGGN transition only to 7000

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 25: Climb to 500 feet on heading 249°. Then climbing left turn to intercept CVV R-338 to CVV VOR/DME.Cross CVV VOR/DME at or above 2000 feet. Thence....

....Via assigned transition or fly heading 158° and expect vectors to join assigned route.

DIGGN TRANSITION (CVV1.DIGGN): Via CVV R-166 to DIGGN, cross DIGGN at or above 7000 feet.

PAINE TRANSITION (CVV1.PAE): Via CVV R-118 to PAE VOR/DME. Cross PAE VOR/DME at or above 3000 feet.

PENN COVE ONE DEPARTURE (CVV1.CVV)

OAK HARBOR, WASHINGTON

RNAV (GPS) RWY 25

APCH CRS	Rwy ldg	8000
249°	TDZE	28
	Arpt Elev	47

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (NUW)

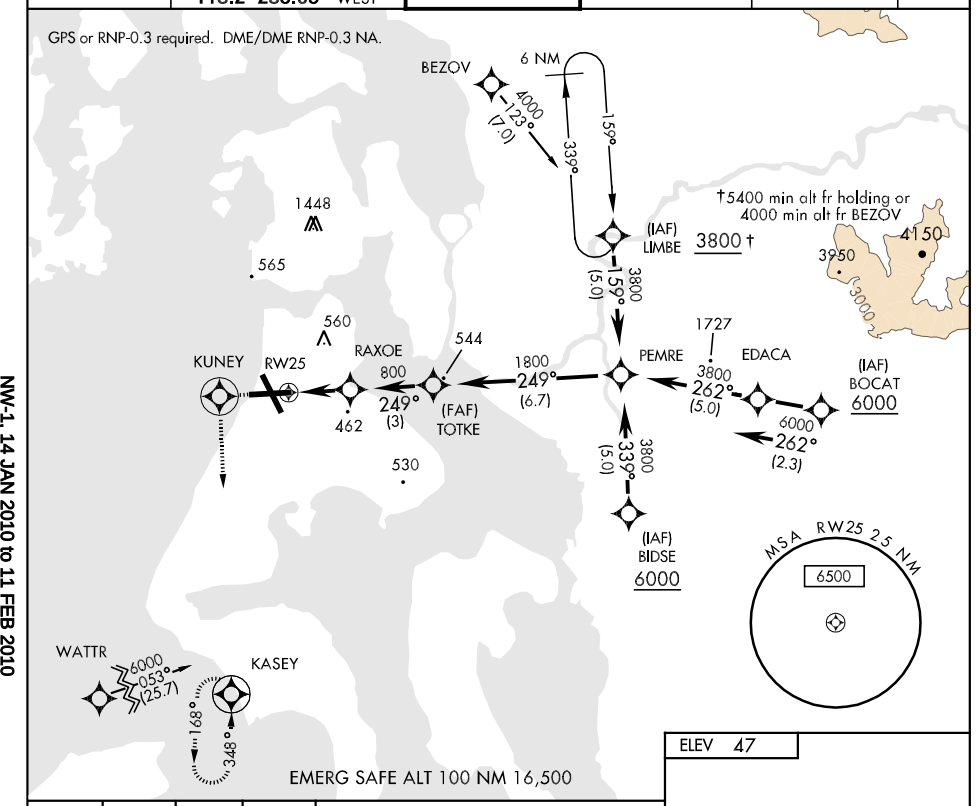
* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 2 miles, CAT D to 2¼ miles, CAT E to 2½ miles. PAR to ¾ mile.

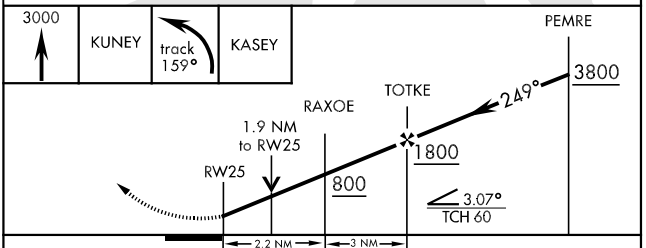
ALSF-1

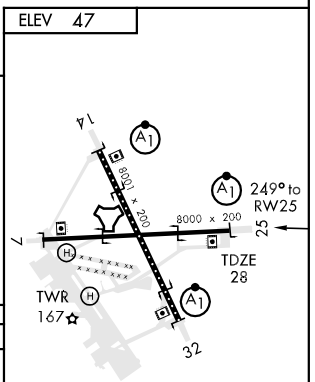
MISSED APPROACH: Climb to 3000 direct KUNEY, then turn left via track 159° to KASEY and hold.

ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.







CATEGORY	A	B	C	D	E
LNAV MDA*	700-½ 672 (700-½)		700-1½ 672 (700-1½)	700-1¾ 672 (700-1¾)	700-2 672 (700-2)
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)	1100-3 1053 (1100-3)
S-PAR 25*	228-½	200	(200-½)	GS 3.00°	

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 7

TACAN	APCH CRS	Rwy ldg	8000
Chan 85	058°	TDZE	25
		Arpt Elev	47

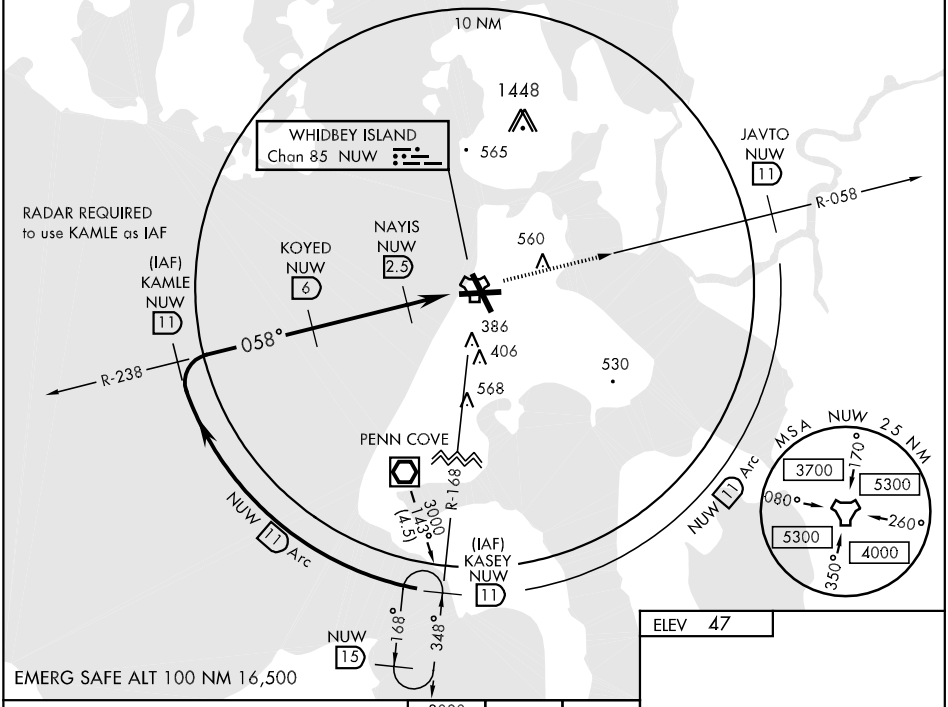
AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (NUW)

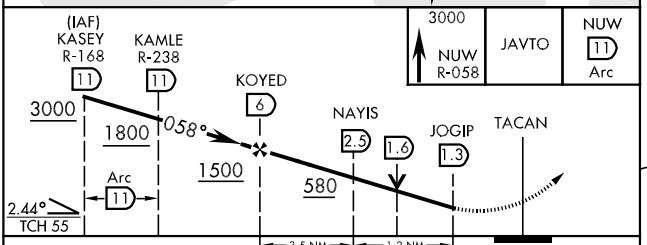
MISSED APPROACH: Climb to 3000 via R-058 to JAVTO, then arc SE of NUW TACAN via 11 DME Arc to KASEY and hold.

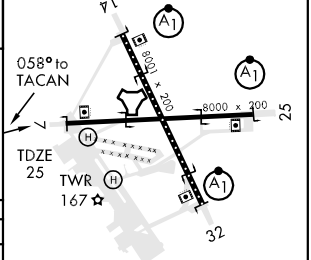
ATIS	WHIDBEY APP CON		WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8	EAST	127.9 340.2	121.75 336.4	135.1 379.9	
	118.2 285.65	WEST				

CAUTION:
CAT CD intmed seg length 5 NM



ELEV 47





CATEGORY	A	B	C	D
S-7	440-1 415 (400-1)		440-1¼ 415 (400-1¼)	
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)
S-PAR 7	125-½ 100 (100-½) GS 3.00°			

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 14

TACAN	APCH CRS	Rwy ldg	8001
NUW Chan 85	141°	TDZE	39
		Arpt Elev	47

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (NUW)

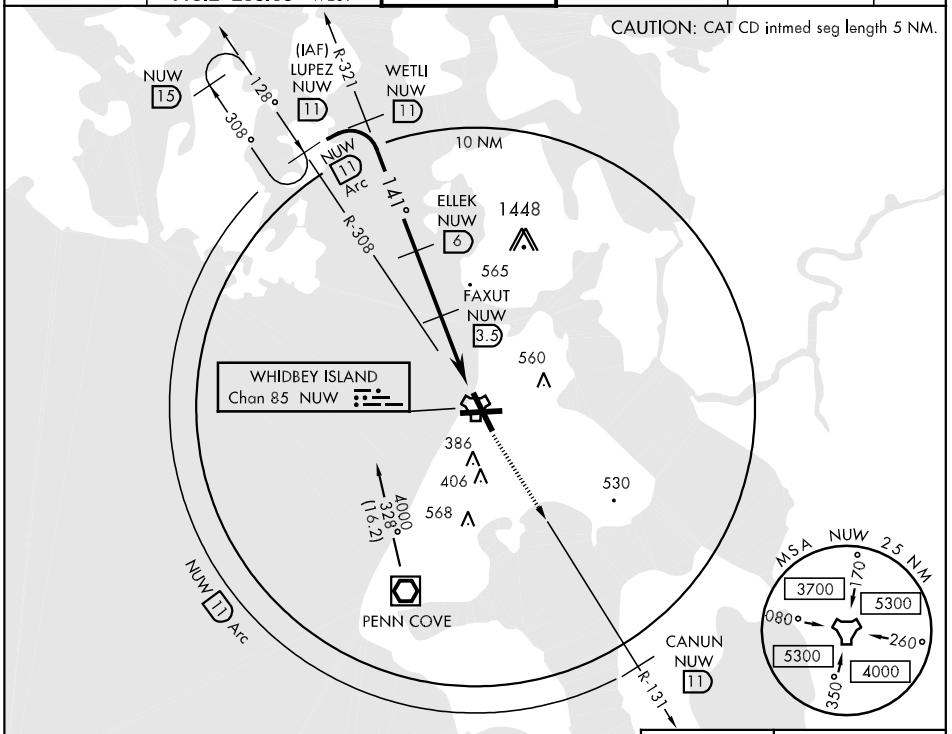
*When ALS inop, increase vis CAT AB to1 mile, CAT C to 1½ miles, CAT D to 1¾ miles.
** When ALS inop, increase vis CAT ABCD to ½ mile.

ALSF-1

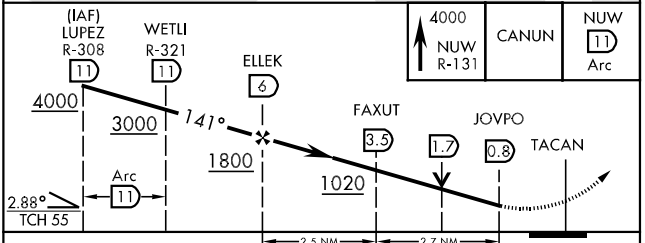
MISSED APPROACH: Climb to 4000 via R-131 to CANUN, then arc SW of NUW TACAN via 11 DME Arc to LUPEZ and hold.

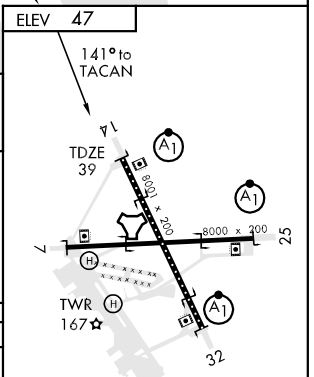
ATIS	WHIDBEY APP CON		WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8	EAST	127.9 340.2	121.75 336.4	135.1 379.9	
	118.2 285.65	WEST				

CAUTION: CAT CD intmed seg length 5 NM.



EMERG SAFE ALT 100 NM 16,500





CATEGORY	A	B	C	D
S-14*	620-½ 581 (600-½)		620-1 581 (600-1)	620-1¼ 581 (600-1¼)
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)
S-PAR 14**	139-¼ 100 (100-¼) GS 3.00°			

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

TACAN RWY 25

TACAN NUW Chan 85	APCH CRS 254°	Rwy ldg 8000 TDZE 28 Arpt Elev 47

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (NUW)

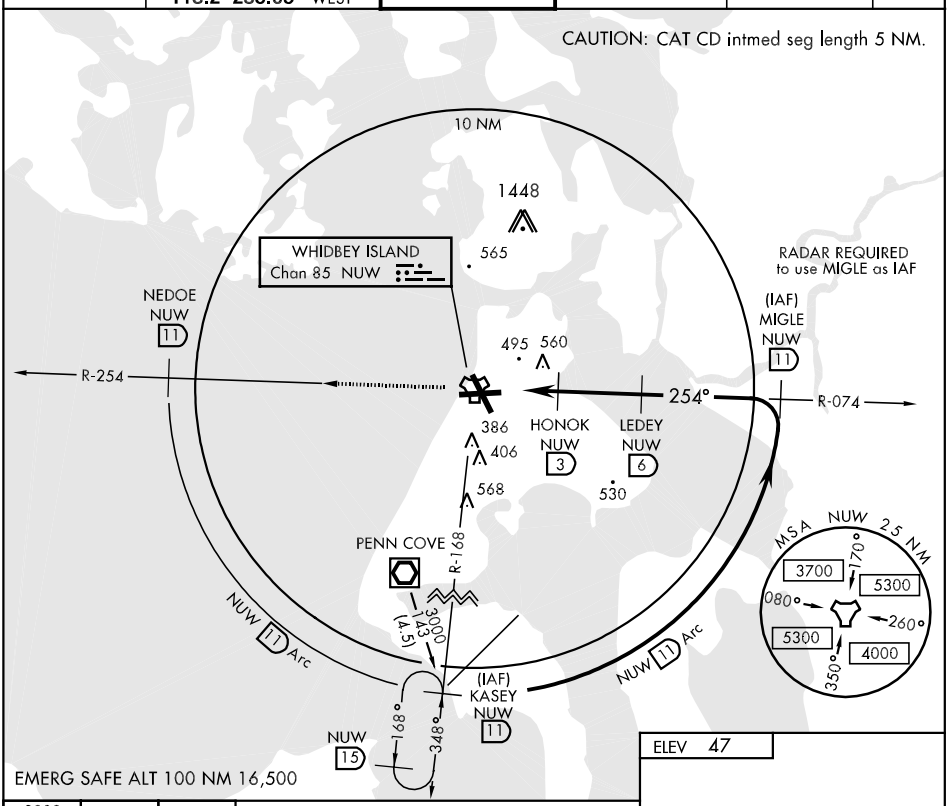
▼ * When ALS inop, increase vis CAT AB to 1 mile, CAT C to 2 miles, CAT D to 2¼ miles.
** When ALS inop, increase vis CAT ABCD to ¾ mile.

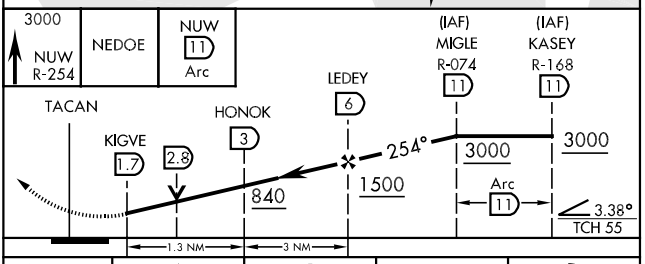
ALSF-1 (A1)

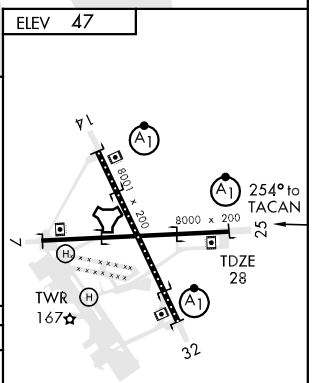
MISSED APPROACH: Climb to 3000 via R-254 to NEDOE, then arc SW of NUW TACAN via 11 DME Arc to KASEY and hold.

ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CD intmed seg length 5 NM.







CATEGORY	A	B	C	D
S-25 *	760-½ 732 (800-½)		760-1½ 732 (800-1½)	760-1¾ 732 (800-1¾)
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)
S-PAR 25**	228-½ 200 (200-½) GS 3.00°			

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

NW-1, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 32

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
NUW Chan 85	311°	8001	47	47

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (NUW)

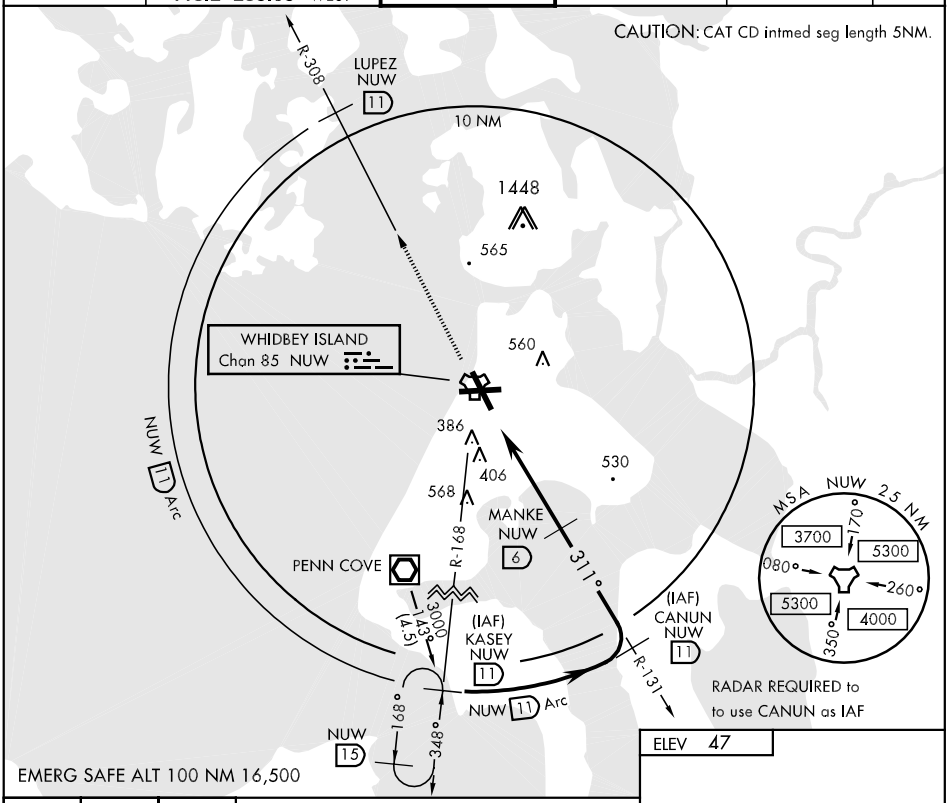
* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1 ¾ Miles, CAT D to 2 miles.
** When ALS inop, increase vis CAT ABCD to ¾ mile.

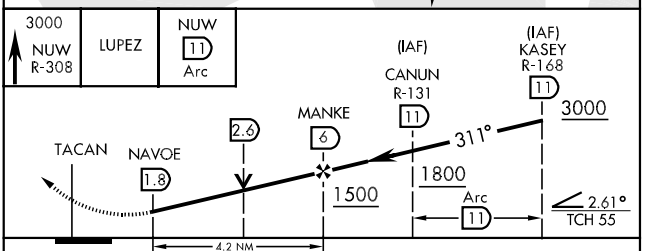
ALSF-1

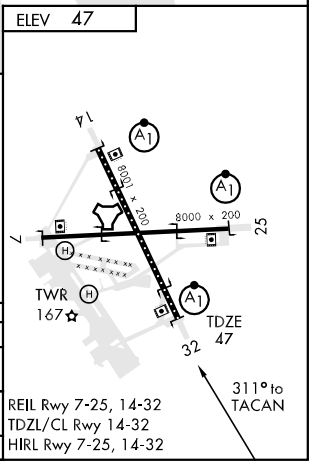
MISSED APPROACH: Climb to 3000 via R-308 to LUPEZ, then Arc SW of NUW TACAN via 11 DME Arc to KASEY and hold.

ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CD intmed seg length 5NM.







CATEGORY	A	B	C	D
S-32*	660-½ 613 (700-½)		660-1¼ 613 (700-1¼)	660-1½ 613 (700-1½)
CIRCLING	780-1 733 (800-1)	800-1¼ 753 (800-1¼)	800-2¼ 753 (800-2¼)	860-2¾ 813 (900-2¾)
S-PAR 32**	247-½ 200 (200-½) GS 3.00°			

REIL Rwy 7-25, 14-32
TDZL/CL Rwy 14-32
HIRL Rwy 7-25, 14-32

APP CRS		
071°	Rwy Idg	2758
	TDZE	193
	Apt Elev	193

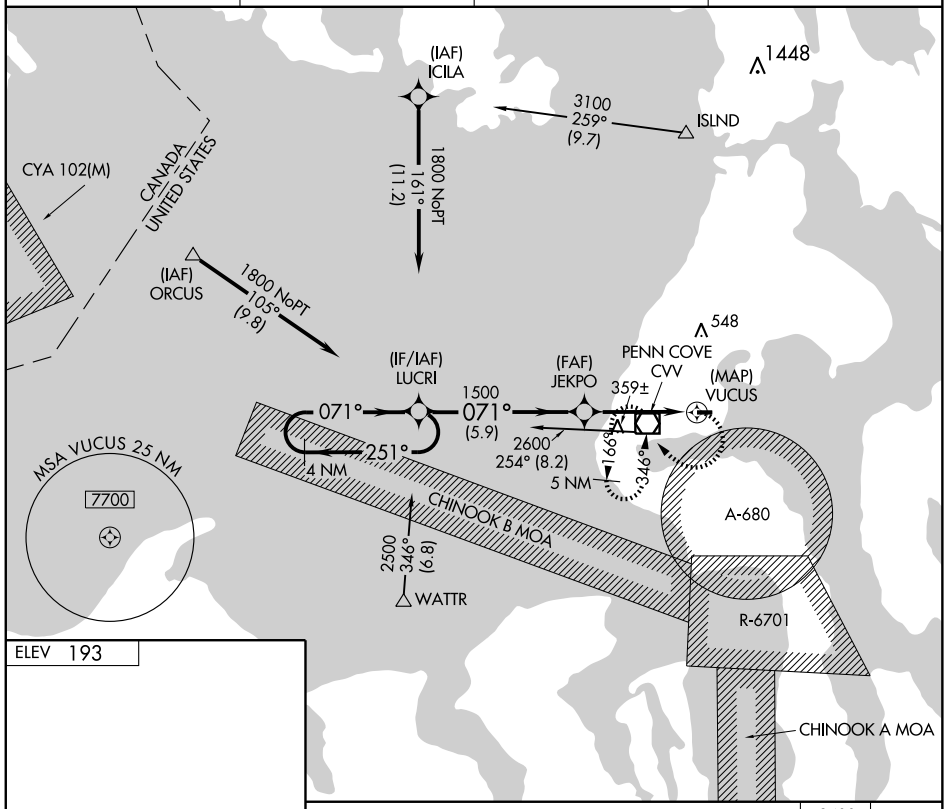
RNAV (GPS) RWY 7

OAK HARBOR/AJ EISENBERG (OKH)

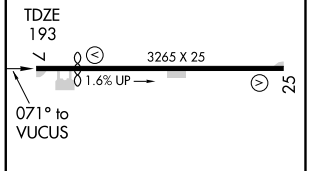
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Circling north of Rwy 7-25 NA at night. When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet.

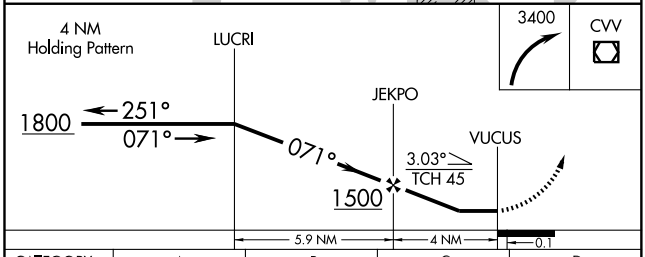
MISSED APPROACH: Climbing right turn to 3400 direct CVV VOR/DME and hold, continue climb-in-hold to 3400.

AWOS-3	WHIDBEY ATIS	WHIDBEY APP CON	UNICOM
132.775	134.15 281.5	118.2 285.65	122.8 (CTAF)



ELEV 193





CATEGORY	A	B	C	D
LNAV MDA	620-1 427 (500-1)		NA	
CIRCLING	620-1 427 (500-1)	660-1 467 (500-1)	NA	

LIRL Rwy 7-25

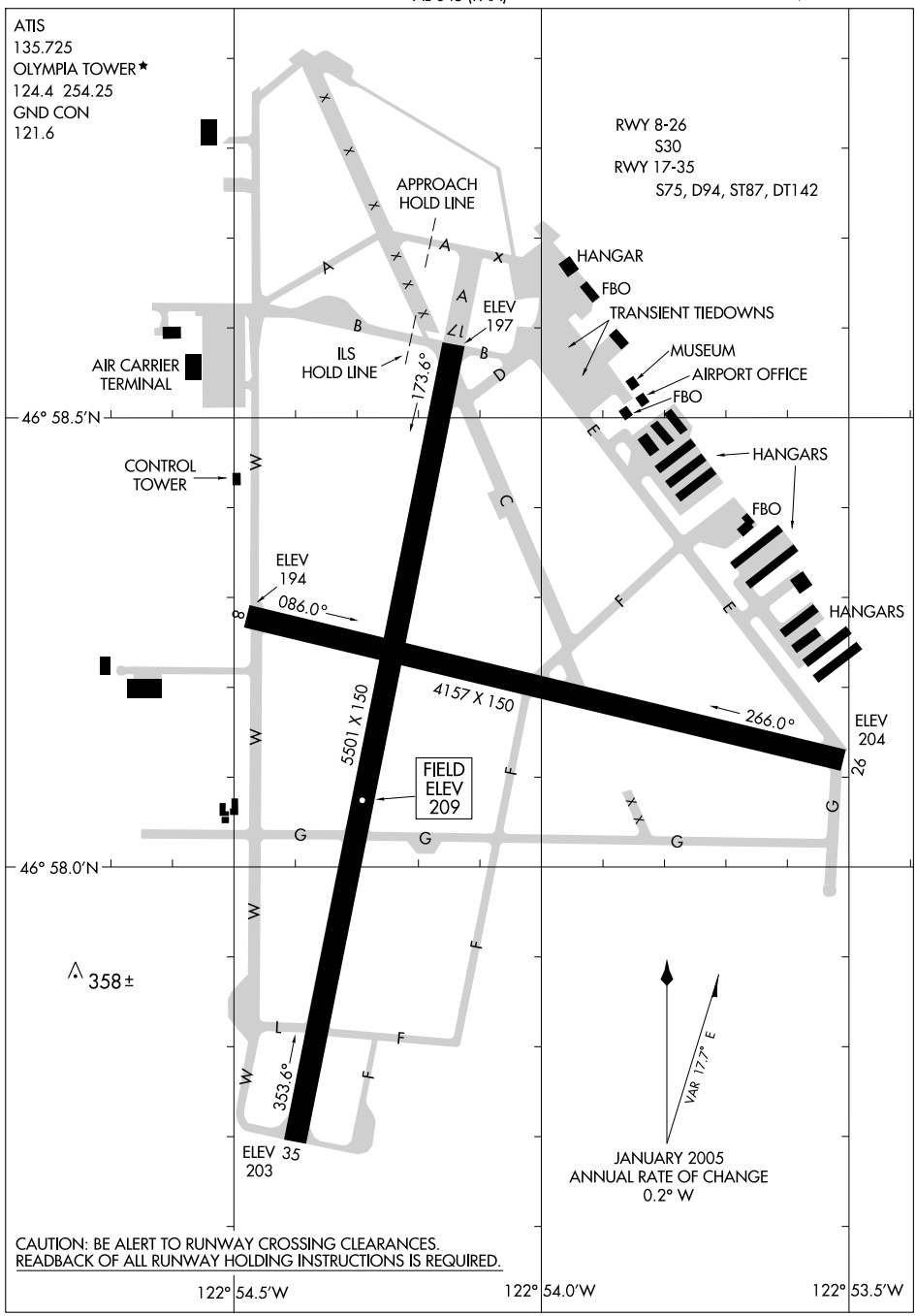
NW-1, 14 JAN 2010 to 11 FEB 2010

09127

AIRPORT DIAGRAM

AL-645 (FAA)

OLYMPIA RGNL (OLM)
OLYMPIA, WASHINGTON



NW-1. 14 JAN 2010 to 11 FEB 2010

LOC I-OLM	APP CRS	Rwy Idg	5501
111.9	172°	TDZE	207
		Apt Elev	209

ILS or LOC RWY 17

OLYMPIA RGNL (OLM)

RADAR or DME required. When local altimeter setting not received, use Sanderson Field altimeter setting and increase all DA 53 feet and all MDA 60 feet; increase circling visibility Cat D ¼ mile. For inoperative MALSR, when using Sanderson Field altimeter setting, increase S-ILS 17 visibility to 1 mile.

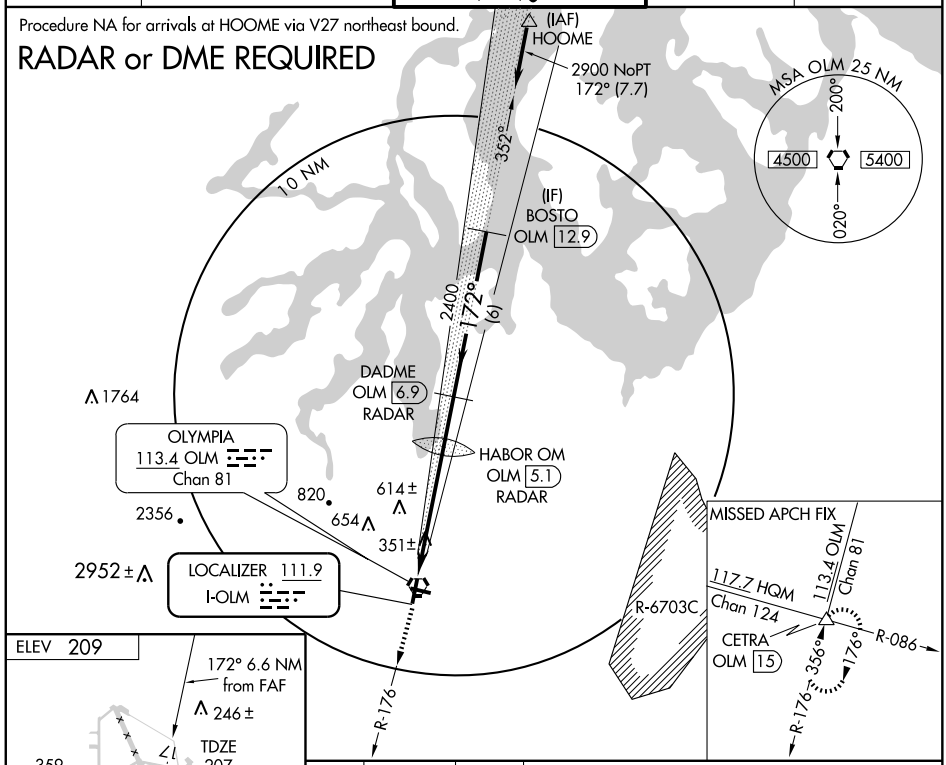
MALSR

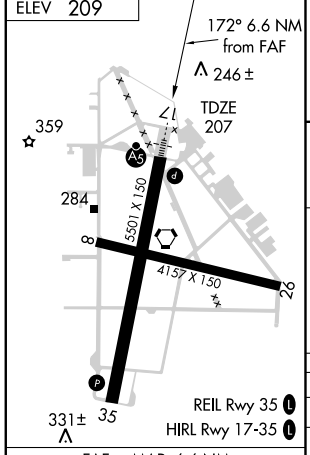
MISSED APPROACH: Climb to 1400, then continue climb to 5500 via OLM VORTAC R-176 to CETRA INT/OLM 15 DME and hold, continue climb-in-hold to 5500.

ATIS	SEATTLE APP CON	OLYMPIA TOWER ★	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95

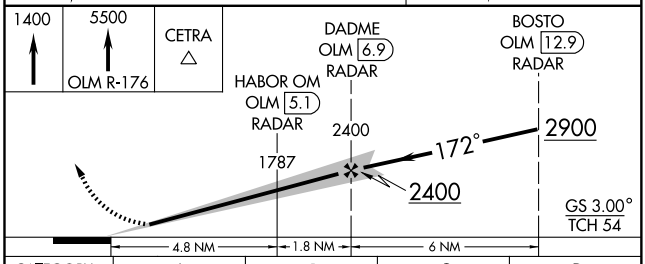
Procedure NA for arrivals at HOOME via V27 northeast bound.

RADAR or DME REQUIRED





FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D
S-ILS 17	414-½ 207 (300-½)			
S-LOC 17	640-½ 433 (500-½)		640-¾ 433 (500-¾)	640-1 433 (500-1)
CIRCLING	720-1 511 (600-1)		820-1¾ 611 (700-1¾)	860-2 651 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 45599 W17A	APP CRS 172°	Rwy Idg 5501 TDZE 207 Apt Elev 209

RNAV (GPS) RWY 17
OLYMPIA RGNL (OLM)

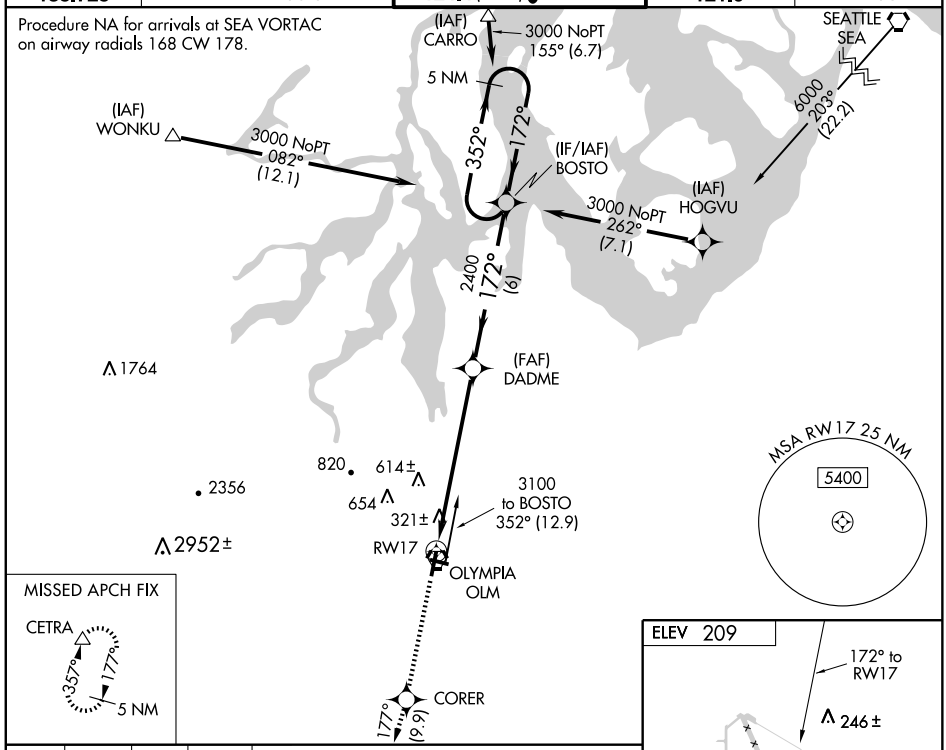
DME/DME RNP-0.3 NA. For inoperative MALSR, increase LPV visibility all Cats to 1¼. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). When local altimeter setting not received, use Sanderson Field altimeter setting and increase all DA 53 feet and all MDA 60 feet; increase LPV and LNAV/VNAV visibility all Cats, LNAV Cats C/D and circling visibility Cats C/D ¼ mile. VDP and Baro-VNAV NA when using Sanderson Field altimeter setting.

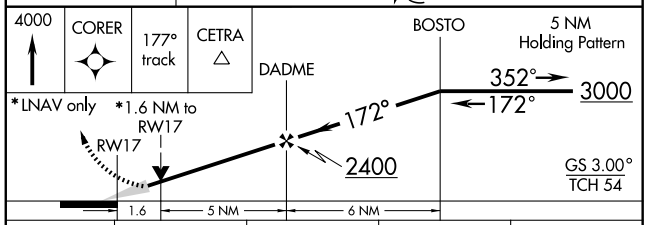
MALSR

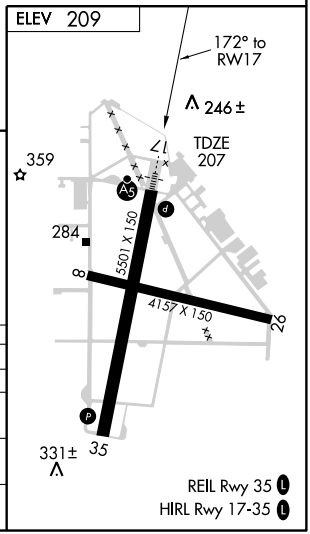
MISSED APPROACH: Climb to 4000 direct CORER and via 177°track to CETRA and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	OLYMPIA TOWER*	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95

Procedure NA for arrivals at SEA VORTAC on airway radials 168 CW 178.







CATEGORY	A	B	C	D
LPV DA	590-¾ 383 (400-¾)			
LNAV/VNAV DA	636-1 429 (500-1)			
LNAV MDA	760-½ 553 (600-½)		760-1 553 (600-1)	760-1¼ 553 (600-1¼)
CIRCLING	760-1 551 (600-1)		820-1¾ 611 (700-1¾)	860-2 651 (700-2)

REIL Rwy 35 L
HIRL Rwy 17-35 L

NW-1, 14 JAN 2010 to 11 FEB 2010

OLYMPIA, WASHINGTON AL-645 (FAA)

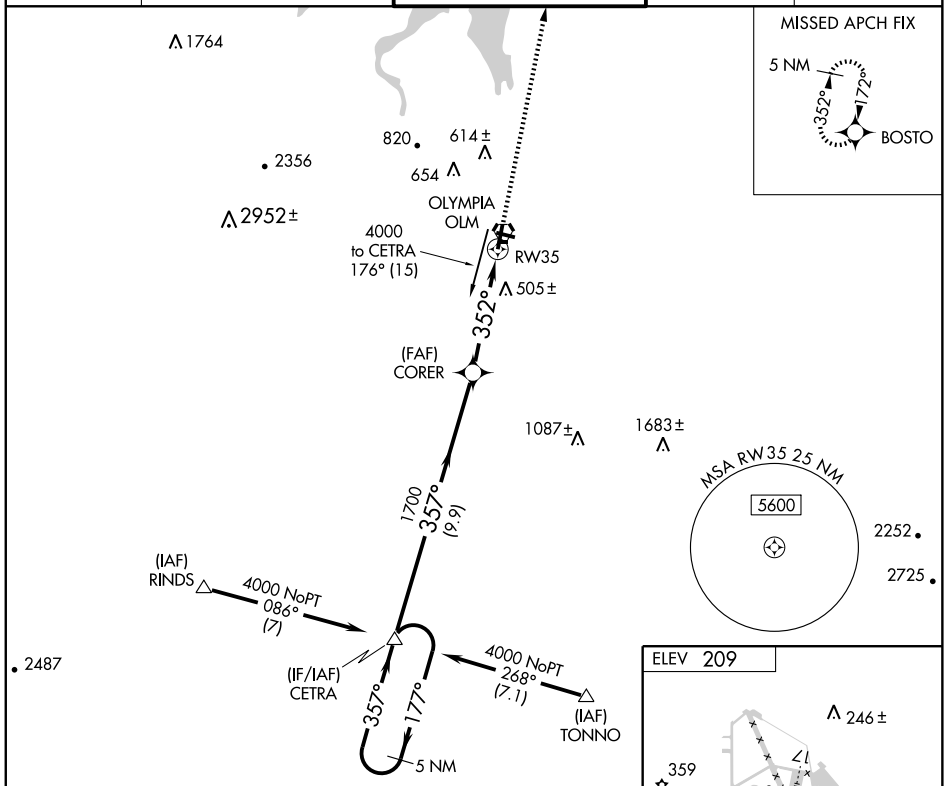
APP CRS	Rwy Idg	5501
352°	TDZE	208
	Apt Elev	209

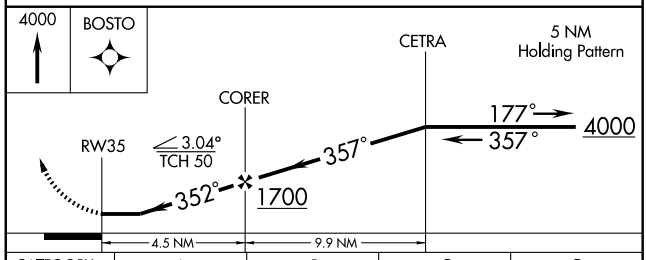
RNAV (GPS) RWY 35
OLYMPIA RGNL (OLM)

When local altimeter setting not received, use Sanderson Field altimeter setting and increase all MDAs 60 feet; increase visibility LNAV Cats C/D ¼ mile and circling Cat D ¼ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

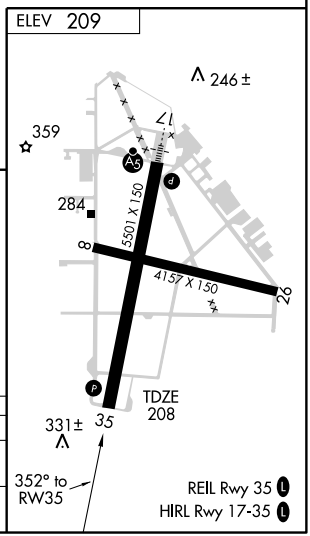
MISSED APPROACH: Climb to 4000 direct BOSTO and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	OLYMPIA TOWER*	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95





CATEGORY	A	B	C	D
LNAV MDA	760-1	552 (600-1)	760-1½ 552 (600-1½)	760-1¾ 552 (600-1¾)
CIRCLING	760-1	551 (600-1)	820-1¾ 611 (700-1¾)	860-2 651 (700-2)



NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OLM	APP CRS	Rwy Idg	N/A
113.4	171°	TDZE	N/A
Chan 81		Apt Elev	209

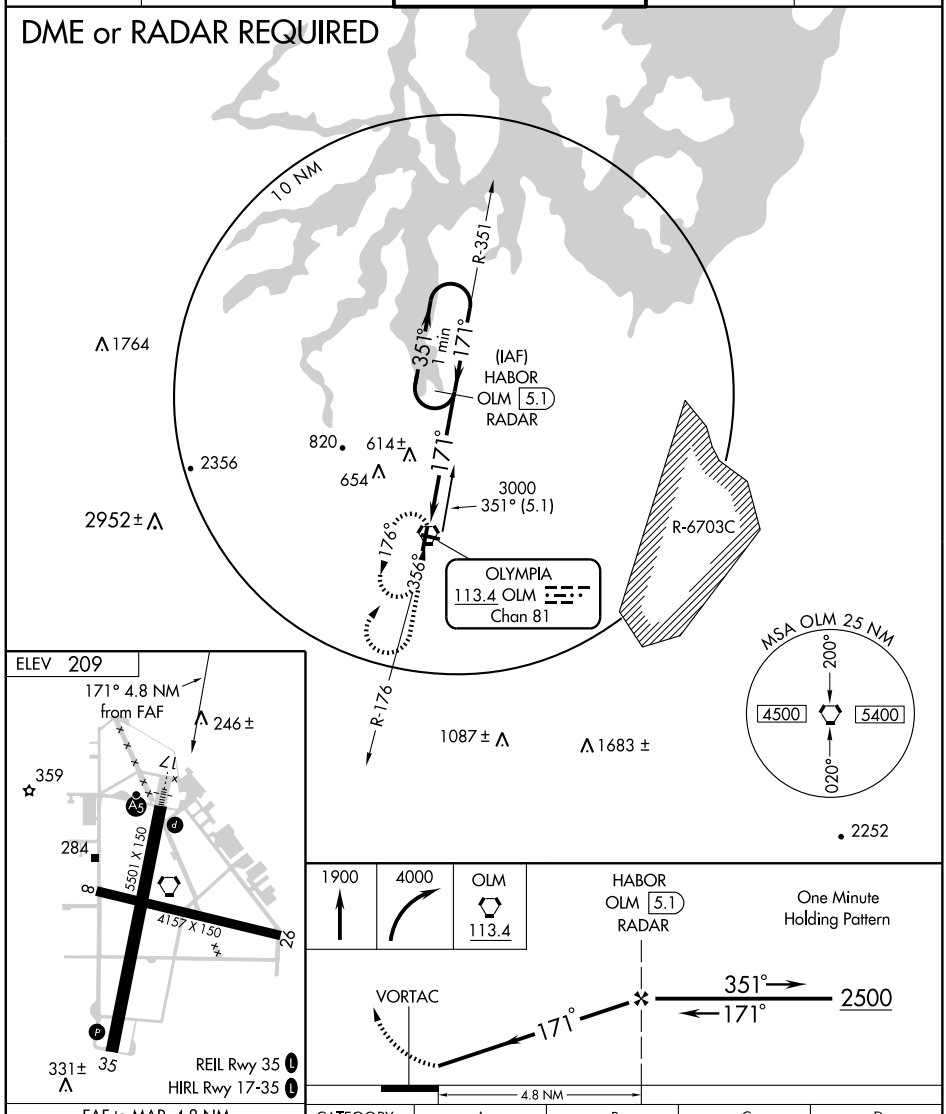
VOR-A
OLYMPIA RGNL (OLM)

When local altimeter setting not received, use Sanderson Field altimeter setting and increase all MDA 60 feet. DME or RADAR required.

MISSED APPROACH: Climb to 1900 then climbing right turn to 4000 direct OLM VORTAC and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	OLYMPIA TOWER*	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95

DME or RADAR REQUIRED



FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
CIRCLING	880-1 671 (700-1)		880-2 671 (700-2)	880-2¼ 671 (700-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

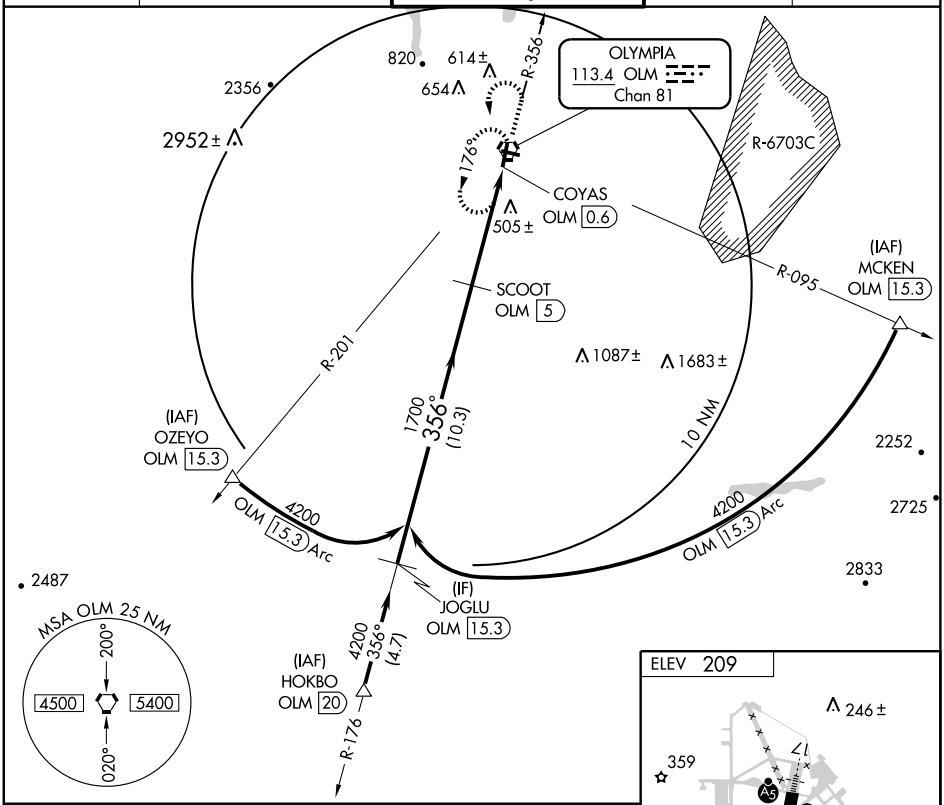
VORTAC OLM	APP CRS	Rwy Idg	5501
113.4	356°	TDZE	208
Chan 81		Apt Elev	209

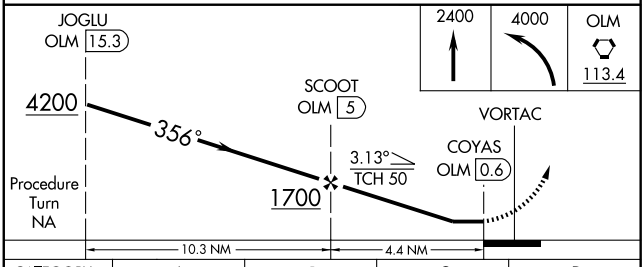
VOR/DME RWY 35
OLYMPIA RGNL (OLM)

When local altimeter setting not received, use Sanderson Field altimeter setting and increase all MDAs 60 feet; increase visibility S-35 Cats C/D ¼ mile and circling Cat D ¼ mile. Visibility reduction by helicopters NA.

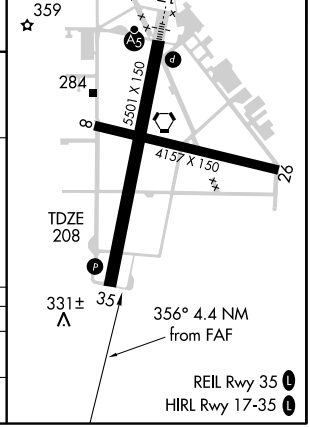
MISSED APPROACH: Climb to 2400, then climbing left turn to 4000 direct OLM VORTAC and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	OLYMPIA TOWER*	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95





CATEGORY	A	B	C	D
S-35	760-1	552 (600-1)	760-1½ 552 (600-1½)	760-1¾ 552 (600-1¾)
CIRCLING	760-1	551 (600-1)	820-1¾ 611 (700-1¾)	860-2 651 (700-2)

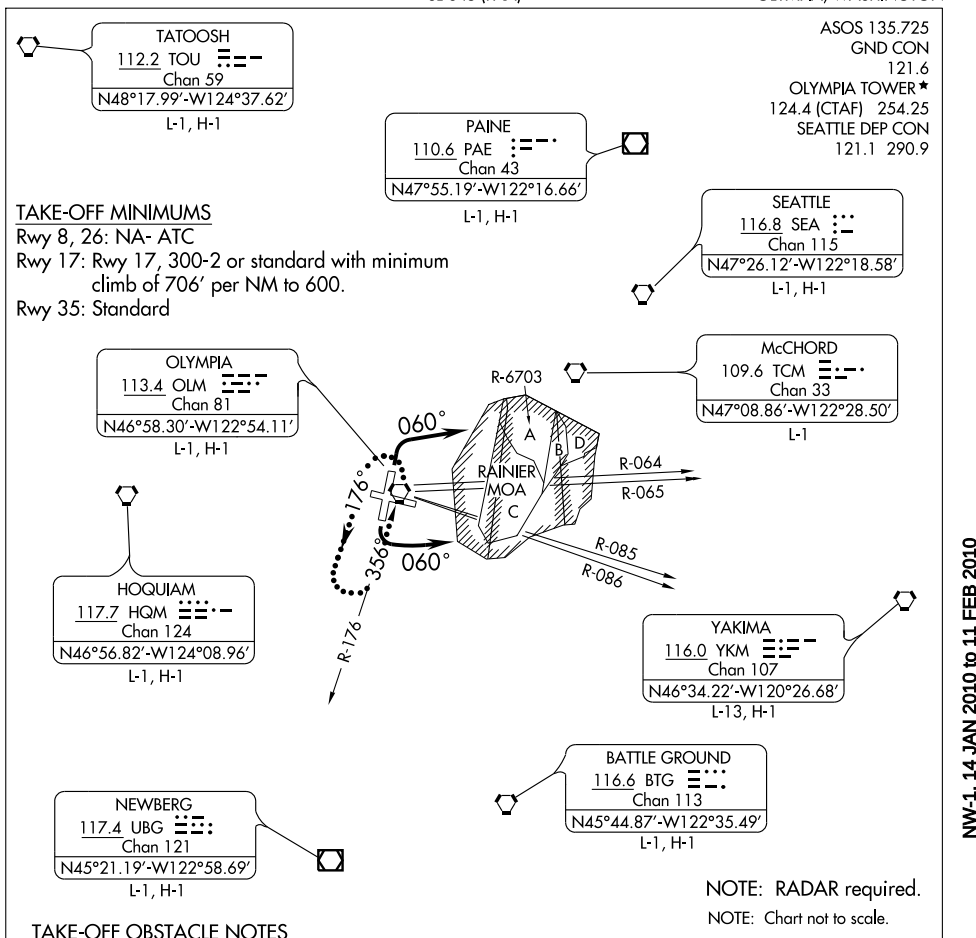


NW-1, 14 JAN 2010 to 11 FEB 2010

YELM TWO DEPARTURE

SL-645 (FAA)

OLYMPIA RGNL (OLM)
OLYMPIA, WASHINGTON



ASOS 135.725
GND CON
121.6
OLYMPIA TOWER★
124.4 (CTAF) 254.25
SEATTLE DEP CON
121.1 290.9

TAKE-OFF MINIMUMS

Rwy 8, 26: NA- ATC
Rwy 17: Rwy 17, 300-2 or standard with minimum climb of 706′ per NM to 600.
Rwy 35: Standard

NOTE: RADAR required.

NOTE: Chart not to scale.

TAKE-OFF OBSTACLE NOTES

RWY 17: Multiple trees beginning 1005′ from DER, 24′ left of centerline, up to 100′ AGL/490′ MSL.
Multiple trees beginning 752′ from DER, 3′ right of centerline, up to 100′ AGL/370′ MSL.
RWY 35: Multiple trees beginning 2176′ from DER, 198 feet left of centerline up to 100′ AGL/313′ MSL.
Multiple trees and FLDLT on HGR beginning 657′ from DER, 621′ right of centerline, up to 100′ AGL/ 315′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Turn left. Thence....

TAKE-OFF RUNWAY 35: Turn right. Thence....

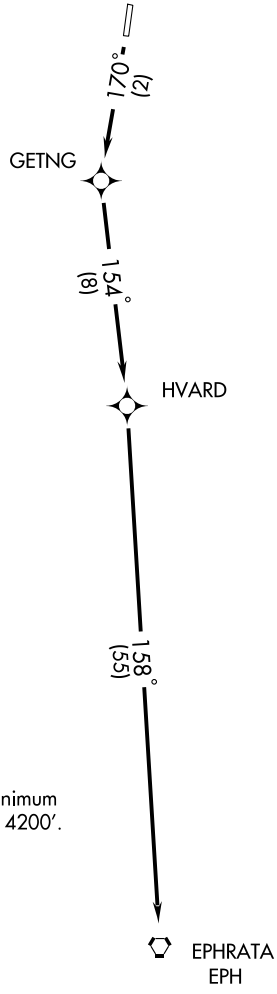
....Climb via heading 060°, maintain 2000. Expect radar vectors on course and filed altitude within five minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC within 6 NM of OLM VORTAC, or 2 minutes after departure for non-DME aircraft, turn left direct OLM VORTAC, continue climb in OLM VORTAC holding pattern to cross OLM VORTAC at or above R-086 CW R-064 4000 feet; R-065 CW R-085 7300 feet, continue climb via assigned route.

NW-1, 14 JAN 2010 to 11 FEB 2010

GETNG ONE DEPARTURE (RNAV) (OBSTACLE)

SEATTLE CENTER
126.1 291.6
SEATTLE RADIO
122.2



NOTE: 2200-2 or standard with a minimum climb of 300 Feet per Mile to 4200'.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb to 4200 via 170° course to GETNG WP, 154° course to HVARD WP, and 158° course to EPH VORTAC. Thence proceed on course.
TAKE-OFF RUNWAY 35: NA

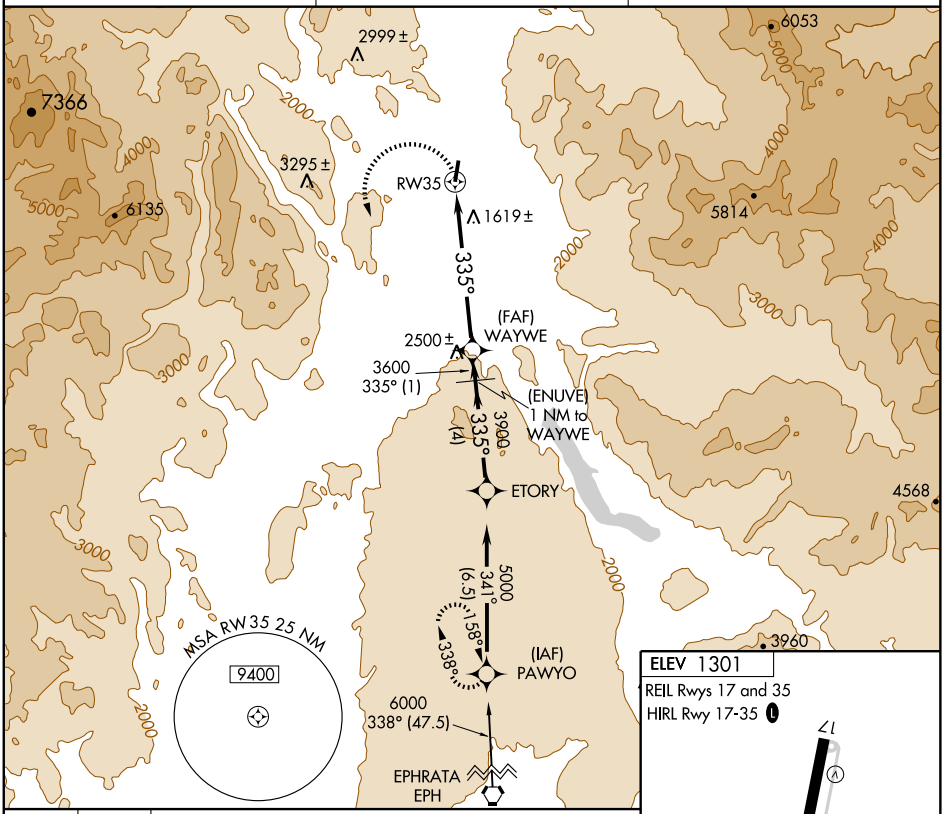
APP CRS	Rwy Idg	4654
335°	TDZE	1299
	Apt Elev	1301

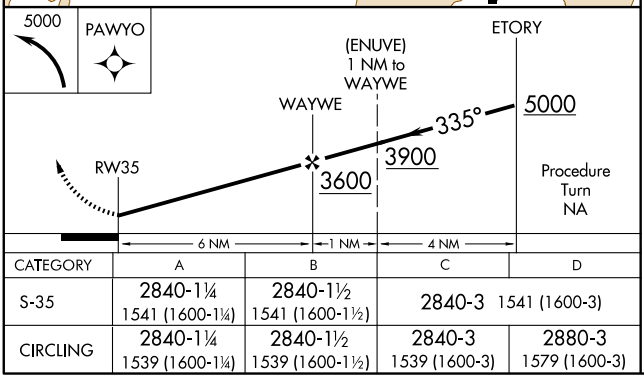
GPS RWY 35
OMAK (OMK)

NA

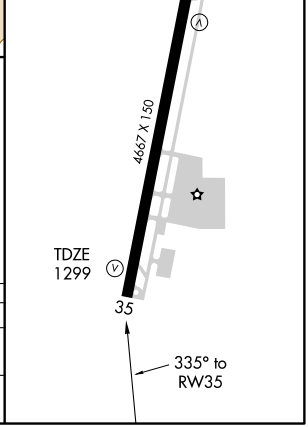
MISSED APPROACH: Climbing left turn to 5000 direct PAWYO WP and hold.

ASOS	SEATTLE CENTER	UNICOM
118.325	126.1 291.6	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-35	2840-1¼ 1541 (1600-1¼)	2840-1½ 1541 (1600-1½)	2840-3 1541 (1600-3)	
CIRCLING	2840-1¼ 1539 (1600-1¼)	2840-1½ 1539 (1600-1½)	2840-3 1539 (1600-3)	2880-3 1579 (1600-3)



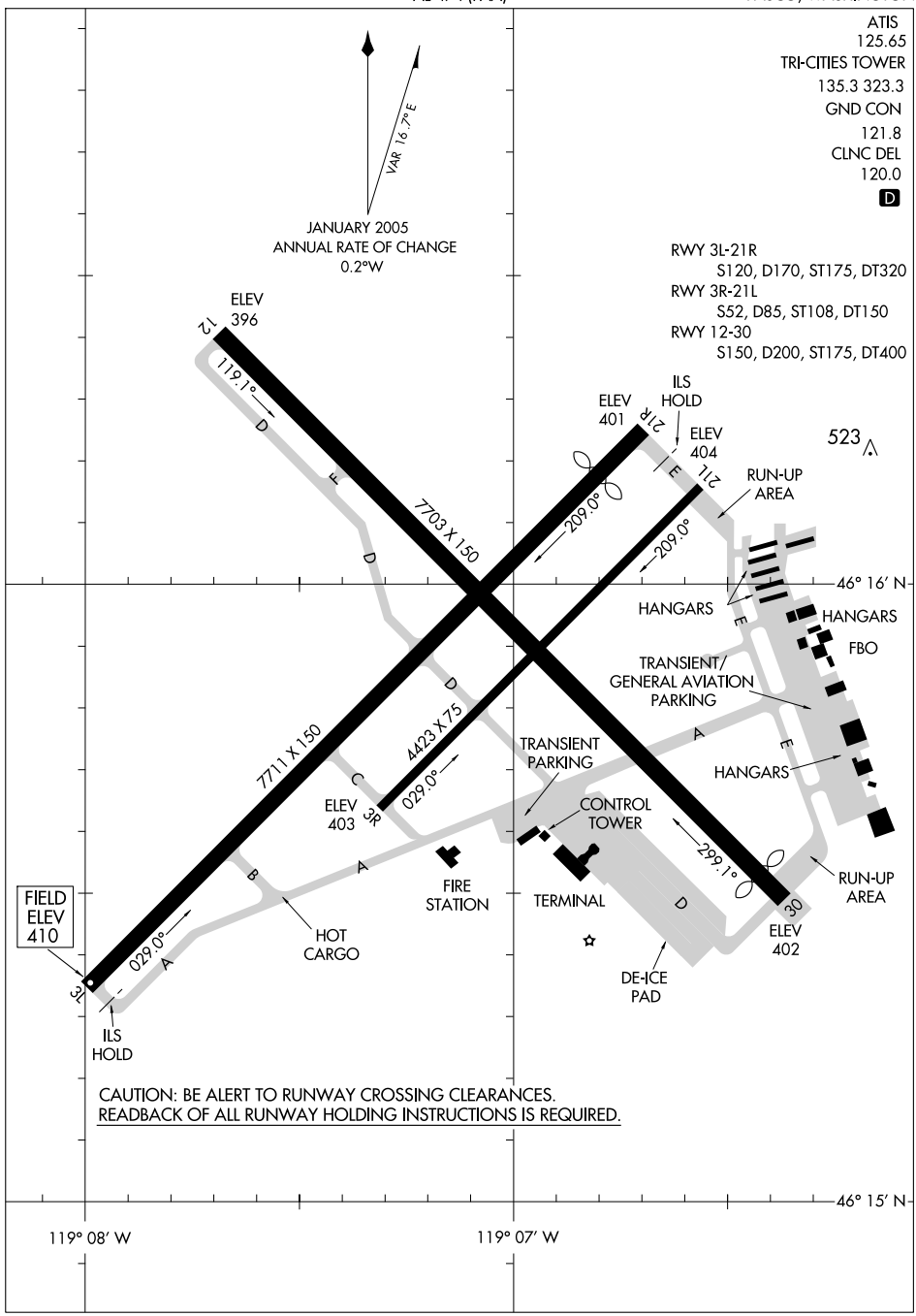
NW-1, 14 JAN 2010 to 11 FEB 2010

09013

AIRPORT DIAGRAM

AL-474 (FAA)

PASCO/TRI-CITIES (PSC)
PASCO, WASHINGTON



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-PSC	APP CRS	Rwy Idg	7111
108.7	206°	TDZE	404
		Apt Elev	410

ILS or LOC RWY 21R

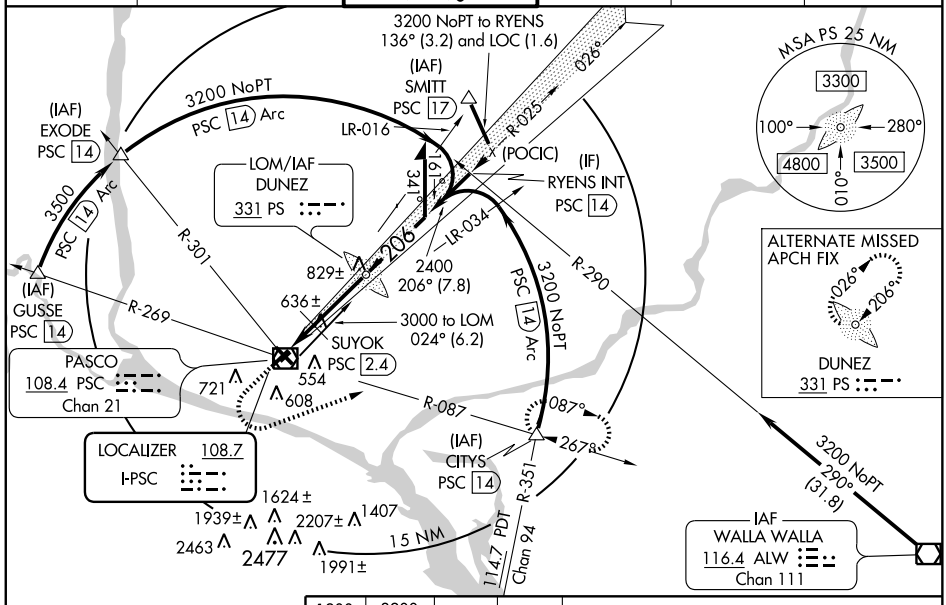
PASCO/ TRI-CITIES (PSC)

▼ If local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet.
▲ DME from PSC VOR/DME. Simultaneous reception of I-PSC and PSC VOR/DME when DME required.
**RVR 1800 authorized with the use of FD or AP or HUD to DA. Circling to Rwy 03R NA at night.

MALSR

MISSED APPROACH: Climb to 1200 then climbing left turn to 3200 via heading 050° and PSC VOR/DME R-087 to CITYS INT/ PSC 14 DME and hold.

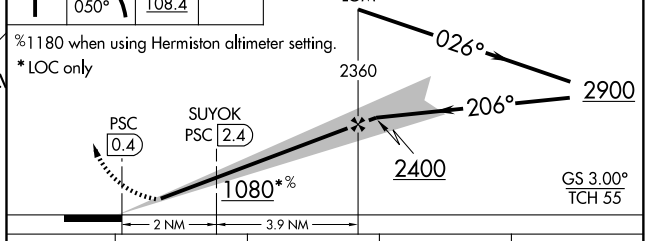
ATIS*	CHINOOK APP CON*	TRI-CITIES TOWER*	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95



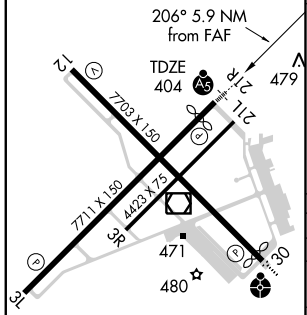
1200	3200	PSC	CITYS
	050°	R-087	△
		108.4	

Remain within 10 NM

%1180 when using Hermiston altimeter setting.
*LOC only



ELEV 410 D



FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
S-ILS 21R	**604/24	200 (200-½)		
S-LOC 21R	1080/24	676 (700-½)	1080-1½ 676 (700-1½)	1080-1¾ 676 (700-1¾)
CIRCLING	1080-1	670 (700-1)	1080-2 670 (700-2)	1080-2¼ 670 (700-2¼)
SUYOK FIX MINIMUMS				
S-LOC 21R	900/24	496 (500-½)	900/40 496 (500-¾)	900/50 496 (500-1)
CIRCLING	920-1	510 (600-1)	920-1½ 510 (600-1½)	1040-2 630 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 40206 W03A	APP CRS 026°	Rwy Idg 7111 TDZE 410 Apt Elev 410

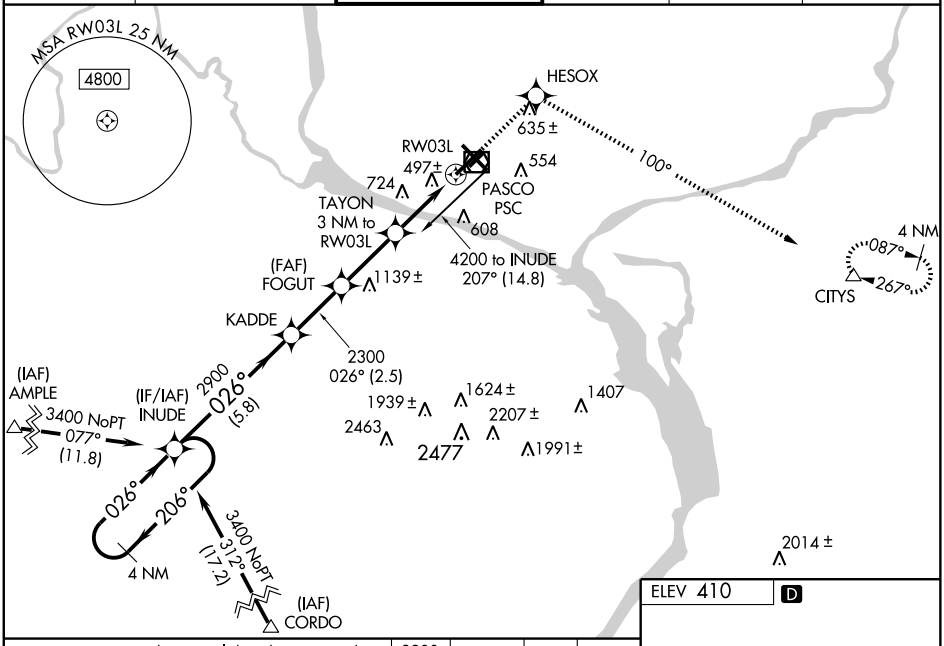
RNAV (GPS) RWY 3L

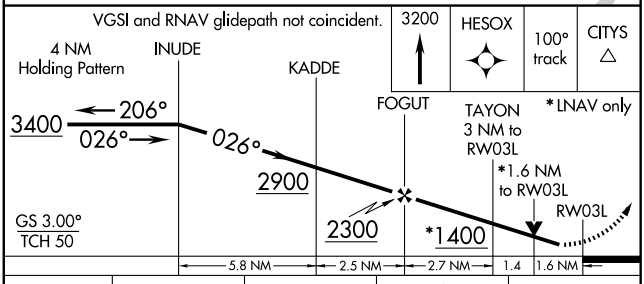
PASCO/TRI-CITIES (PSC)

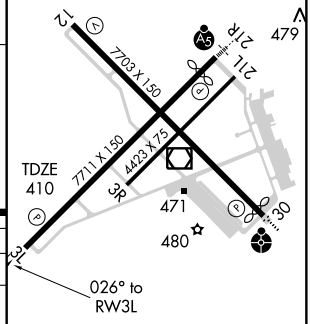
When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visiblities ¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
VDP and Baro-VNAV NA when using Hermiston altimeter setting.
Circling to Rwy 3R NA at night. Visibility reduction by helicopters NA.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3200 direct HESOX and via 100° track to CITYS and hold.

ATIS ★	CHINOOK APP CON ★	TRI-CITIES TOWER ★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95







CATEGORY	A	B	C	D
LPV DA	660-1 250 (300-1)			
LNAV/VNAV DA	829-1½ 419 (500-1½)			
LNAV MDA	960-1 550 (600-1)		960-1½ 550 (600-1½)	960-1¾ 550 (600-1¾)
CIRCLING	960-1 550 (600-1)		960-1½ 550 (600-1½)	1040-2 630 (700-2)

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 58006 W12A	APP CRS 116°	Rwy Idg 7503 TDZE 402 Apt Elev 410

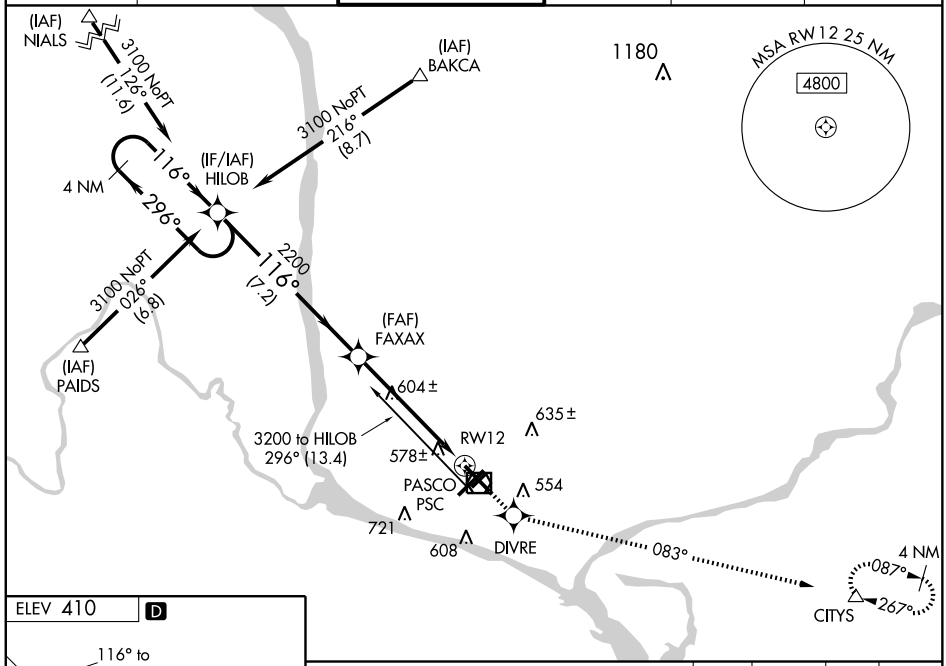
RNAV (GPS) RWY 12

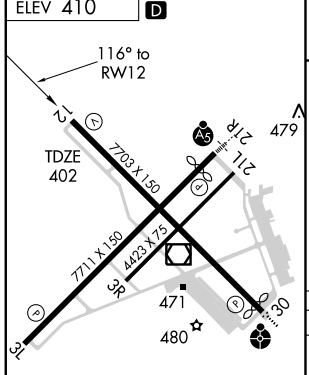
PASCO/TRI-CITIES (PSC)

T A When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visiblities ½ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
VDP and Baro-VNAV NA when using Hermiston altimeter setting.
Circling to Rwy 3R NA at night. DME/DME RNP-0.3 NA.

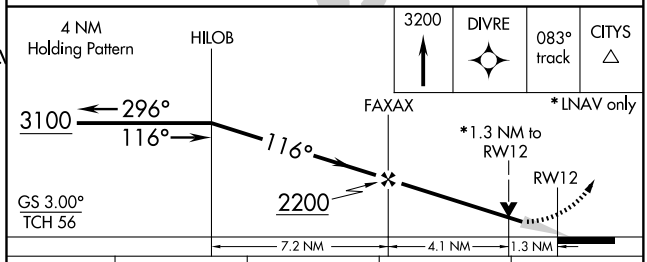
MISSED APPROACH: Climb to 3200 direct DIVRE and via 083° track to CITYS and hold.

ATIS ★	CHINOOK APP CON ★	TRI-CITIES TOWER ★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.6	121.8	120.0	122.95





REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L



CATEGORY	A	B	C	D
LPV DA	748-1¼ 346 (400-1¼)			
LNAV/VNAV DA	894-1¾ 492 (500-1¾)			
LNAV MDA	860-1 458 (500-1)		860-1¼ 458 (500-1¼)	860-1½ 458 (500-1½)
CIRCLING	920-1 510 (600-1)		920-1½ 510 (600-1½)	1040-2 630 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 40303 W21A	APP CRS 206°	Rwy Idg 7111 TDZE 404 Apt Elev 410

RNAV (GPS) RWY 21R

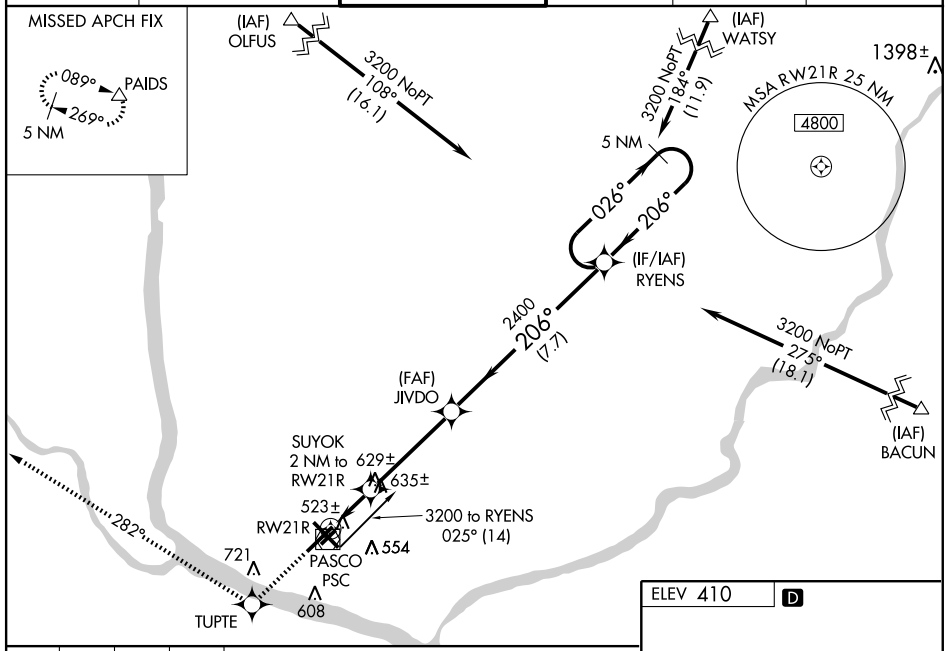
PASCO/TRI-CITIES (PSC)

For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000.
If local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP- 0.3 NA.
VDP and Baro-VNAV NA when using Hermiston altimeter setting.

MALSR

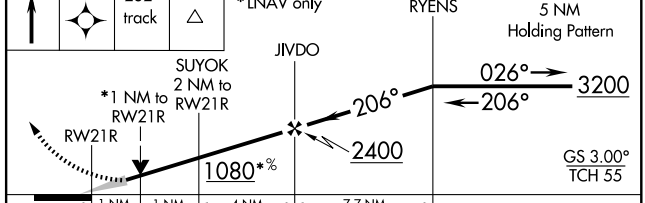
MISSED APPROACH: Climb to 5200 direct TUPTE and via 282° track to PAIDS and hold, continue climb-in-hold to 5200.

ATIS ★	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95

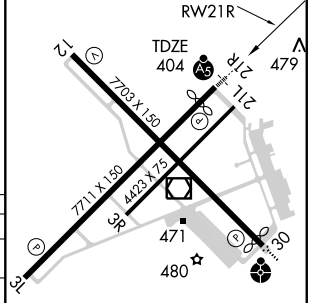


5200	TUPTE	282° track	PAIDS

%1180 when using Hermiston altimeter setting.
*LNAV only



CATEGORY	A	B	C	D
LPV DA	680/24 276 (300-½)			
LNAV/VNAV DA	797/40 393 (400-¾)			
LNAV MDA	780/24 376 (400-½)			780/50 376 (400-1)
CIRCLING	880-1 470 (500-1)		900-1½ 490 (500-1½)	1040-2 630 (700-2)



REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86605 W30A	APP CRS 296°	Rwy Idg 7503 TDZE 405 Apt Elev 410

RNAV (GPS) RWY 30

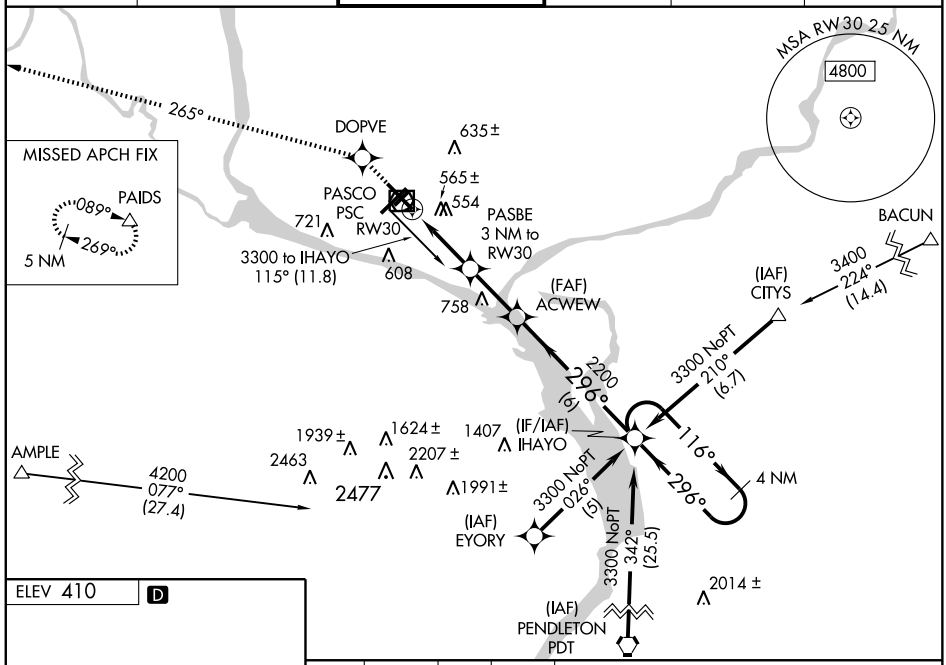
PASCO/TRI-CITIES (PSC)

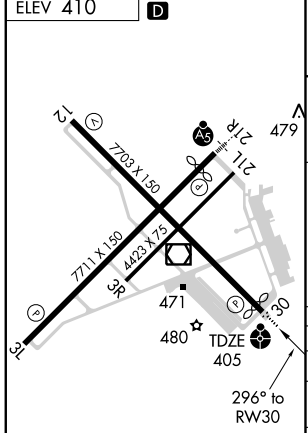
When local altimeter setting not received, use Hermiston altimeter setting and increase all DAs/MDAs 100 feet and all visibilities ½ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
VDP and Baro-VNAV NA when using Hermiston altimeter setting.
Inoperative table does not apply. Circling to Rwy 3R NA at night.
Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

ODALS

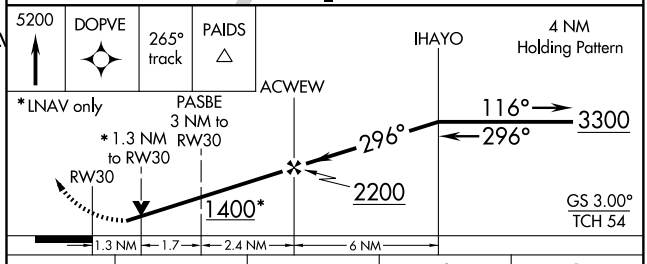
MISSED APPROACH: Climb to 5200 direct DOPVE and via 265° track to PAIDS and hold, continue climb-in-hold to 5200.

ATIS ★	CHINOOK APP CON ★	TRI-CITIES TOWER ★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95





REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

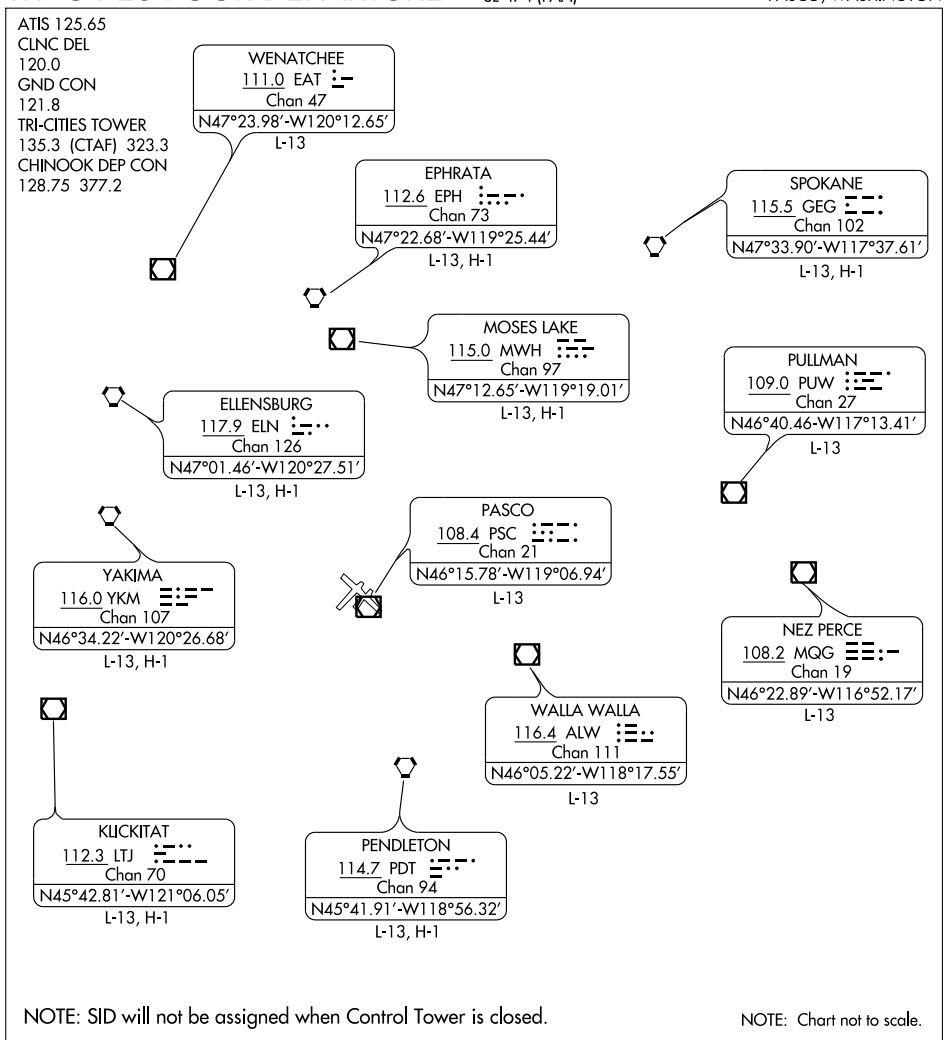


CATEGORY	A	B	C	D
LPV DA	777-1¼ 372 (400-1¼)			
LNAV/VNAV DA	913-1¾ 508 (600-1¾)			
LNAV MDA	880-1 475 (500-1)		880-1¼ 475 (500-1¼)	880-1½ 475 (500-1½)
CIRCLING	920-1 510 (600-1)		920-1½ 510 (600-1½)	1040-2 630 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

TRI-CITIES FOUR DEPARTURE

SL-474 (FAA)



NOTE: SID will not be assigned when Control Tower is closed.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

Fly runway heading, or ATC assigned heading, for vector to assigned route/fix. Maintain 10,000′ or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: Climb runway heading to 3,000′ then reverse course direct PSC VOR/DME to cross at or above MEA for route of flight.

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME PSC	APP CRS	Rwy Idg	7503
108.4	291°	TDZE	405
Chan 21		Apt Elev	410

VOR/DME RWY 30

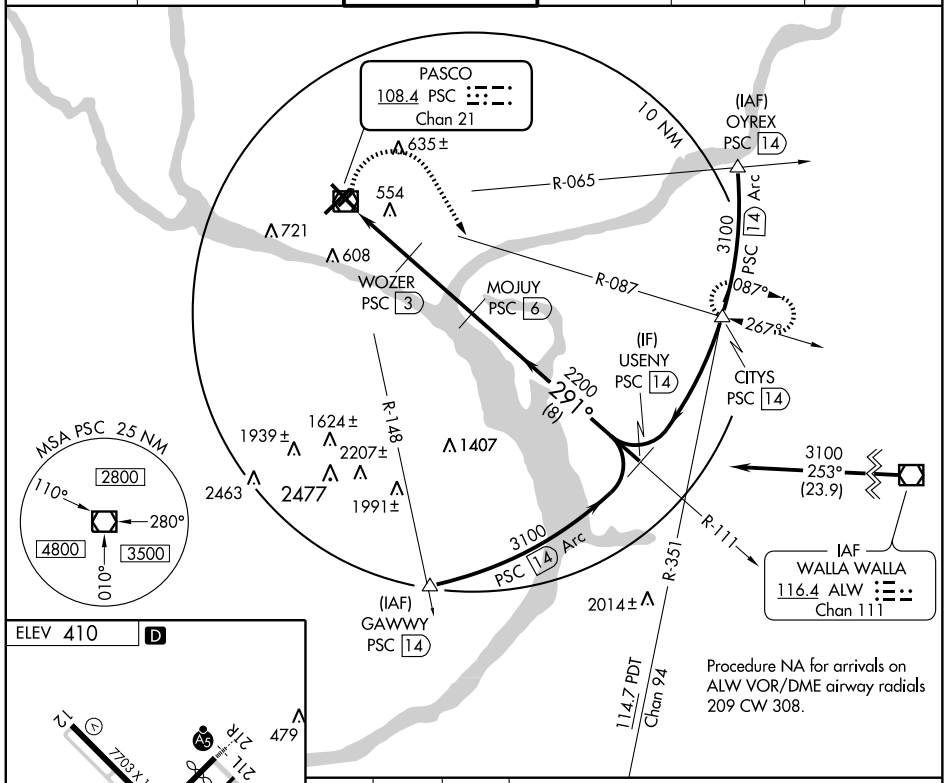
PASCO/TRI-CITIES (PSC)

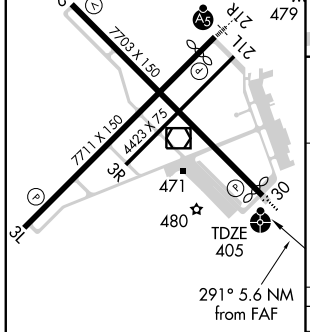
T Inoperative table does not apply to Cat C.
A Visibility reduction by helicopters NA.
When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 100 feet, increase S-30 visibility Cat C ¼ mile, Cat D ½ mile and circling Cat D ¼ mile.

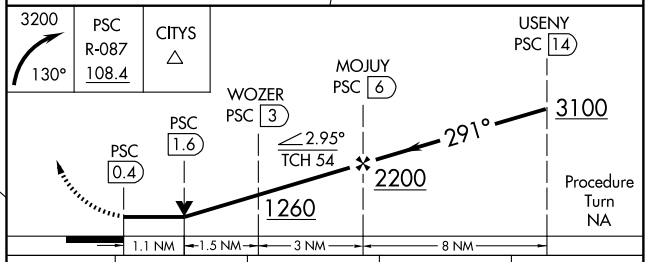
ODALS

MISSED APPROACH: Climbing right turn to 3200 via heading 130° and PSC R-087 to CITYS INT/PSC 14 DME and hold.

ATIS★	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95







CATEGORY	A	B	C	D
S-30	820-¾ 415 (500-¾)		820-1¼ 415 (500-1¼)	
CIRCLING	860-1 450 (500-1)		900-1½ 490 (500-1½)	1040-2 630 (700-2)

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME PSC	APP CRS	Rwy Idg	7111
108.4	195°	TDZE	404
Chan 21		Apt Elev	410

VOR RWY 21R

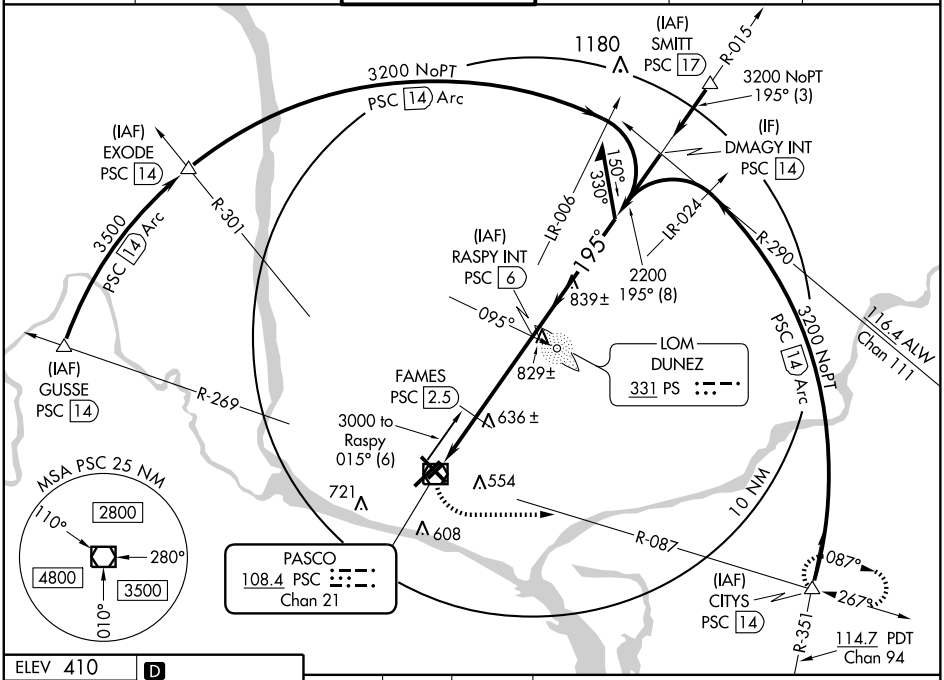
PASCO/ TRI-CITIES (PSC)

If local altimeter setting not received, use Hermiston altimeter setting and increase all MDAs 100 feet.
VDP NA when using Hermiston altimeter setting.
ADF or DME required. Circling to Rwy 03R NA at night.

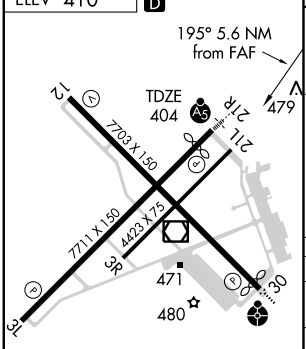
MALSR

MISSED APPROACH: Climbing left turn to 3200 via heading 070° and PSC VOR/DME R-087 to CITYS INT/PSC 14 DME and hold.

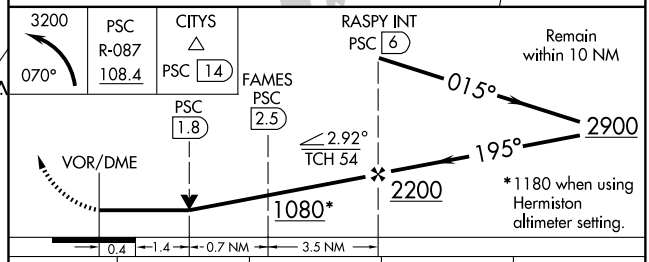
ATIS★	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95



ELEV 410 D



REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L



CATEGORY	A	B	C	D
S-21R	1080/24 676 (700-½)		1080-1½ 676 (700-1½)	1080-1¾ 676 (700-1¾)
CIRCLING	1080-1 670 (700-1)		1080-2 670 (700-2)	1080-2¼ 670 (700-2¼)
FAMES FIX MINIMUMS				
S-21R	900/24 496 (500-½)		900/40 496 (500-¾)	900/50 496 (500-1)
CIRCLING	920-1 510 (600-1)		920-1½ 510 (600-1½)	1040-2 630 (700-2)

LOC I-CLM	APP CRS	Rwy Idg	6347
108.9	083°	TDZE	284
		Apt Elev	291

ILS or LOC RWY 8

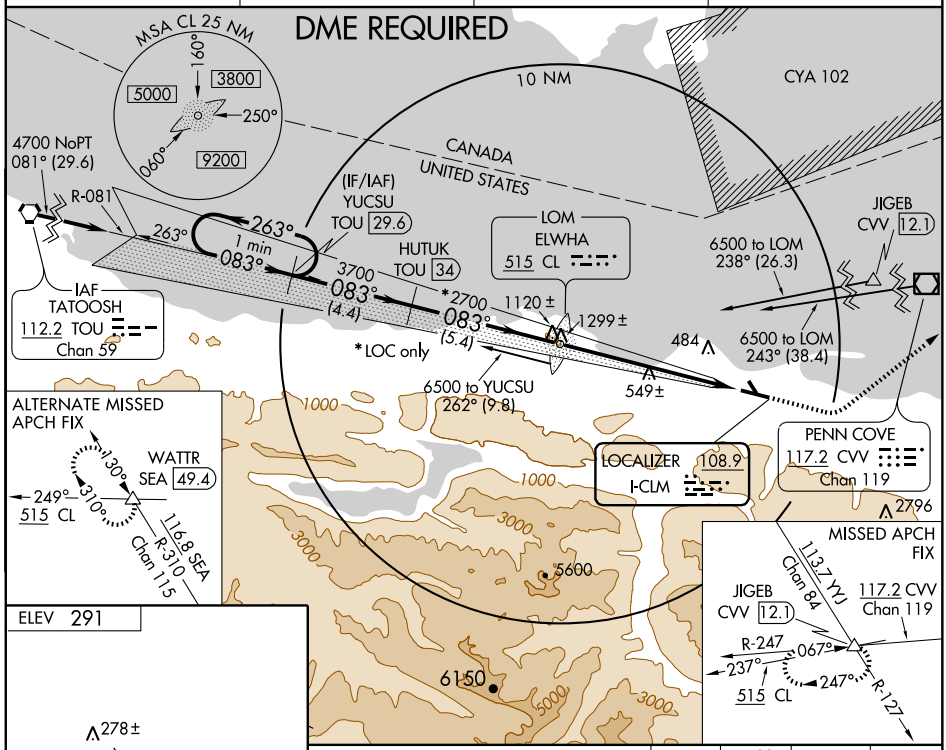
PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

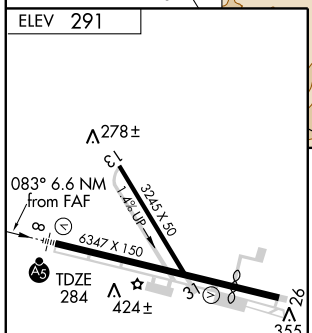
Circling NA south of Rwy 8-26.
DME required.
DME from TOU VORTAC. Simultaneous reception of I-CLM and TOU DME required. If local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDAs 100 feet. ILS procedure NA.

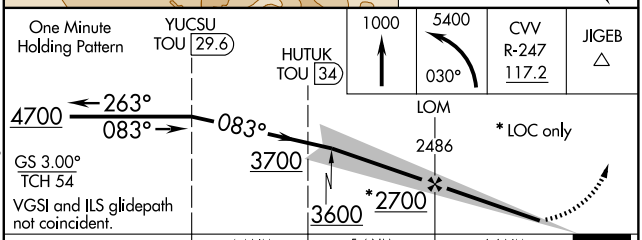
MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 5400 via heading 030° and CVV R-247 to JIGEB/CVV 12.1 DME and hold, continue climb-in-hold to 5400.

ASOS	WHIDBEY APP CON *	CLNC DEL	UNICOM
135.175	118.2 285.65	124.15	122.975 (CTAF) L







LIRL Rwy 13-31
MIRL Rwy 8-26 L
REIL Rwy 26

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

CATEGORY	A	B	C	D
S-ILS 8	486-½	202 (200-½)		
S-LOC 8	840-½	556 (600-½)	840-1 556 (600-1)	840-1¼ 556 (600-1¼)
CIRCLING	840-1	549 (600-1)	840-1½ 549 (600-1½)	860-2 569 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 77703 W08A	APP CRS 082°	Rwy Idg 6347 TDZE 284 Apt Elev 291

RNAV (GPS) RWY 8

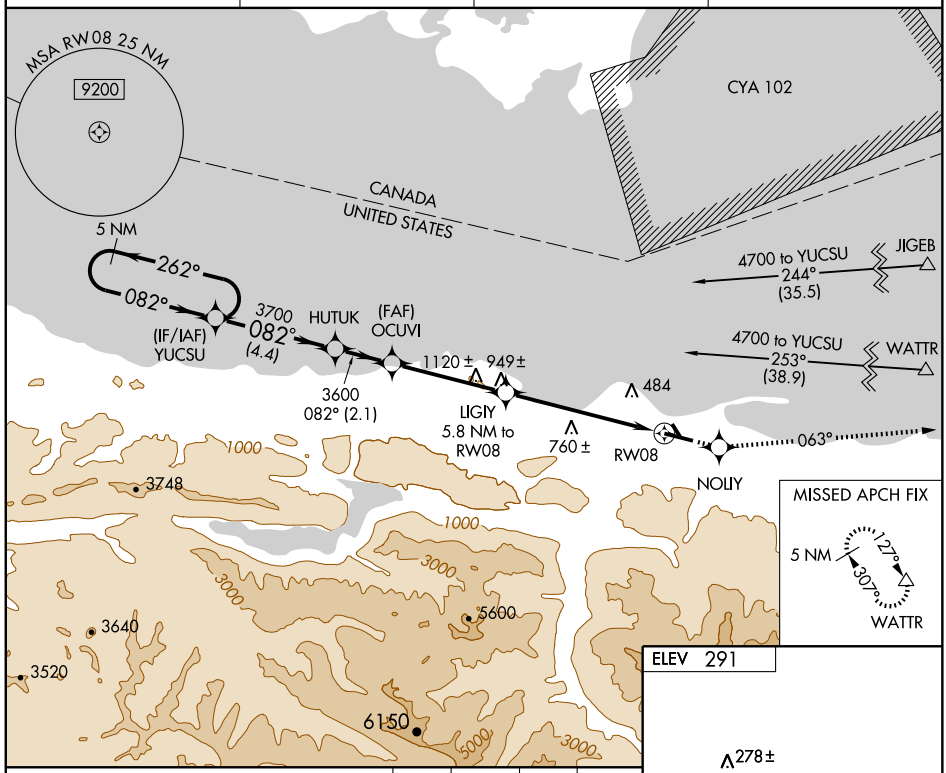
PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

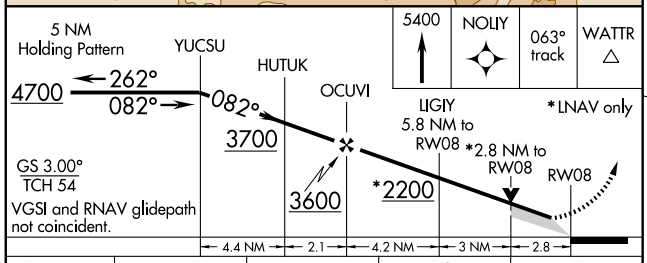
Circling NA south of Rwy 8-26. DME/DME RNP- 0.3 NA. If local altimeter setting not received, use Friday Harbor altimeter setting and increase all DAs/MDAs 100 feet. VDP NA when using Friday Harbor altimeter setting.

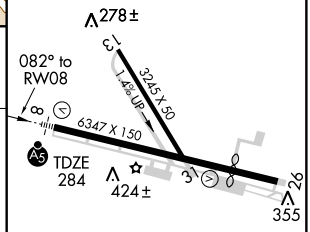
MALSR

MISSED APPROACH: Climb to 5400 direct NOLIY and via 063° track to WATTR and hold, continue climb-in-hold to 5400.

ASOS	WHIDBEY APP CON ★	CLNC DEL	UNICOM
135.175	118.2 285.65	124.15	122.975 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	596-½ 312 (400-½)			
LNAV MDA	1240-¾ 956 (1000-¾)	1240-1 956 (1000-1)	1240-2½ 956 (1000-2½)	
CIRCLING	1240-1¼ 949 (1000-1¼)	1240-1½ 949 (1000-1½)	1240-3 949 (1000-3)	

LIRL Rwy 13-31
MIRL Rwy 8-26 L
REIL Rwy 26

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	4993
263°	TDZE	282
	Apt Elev	291

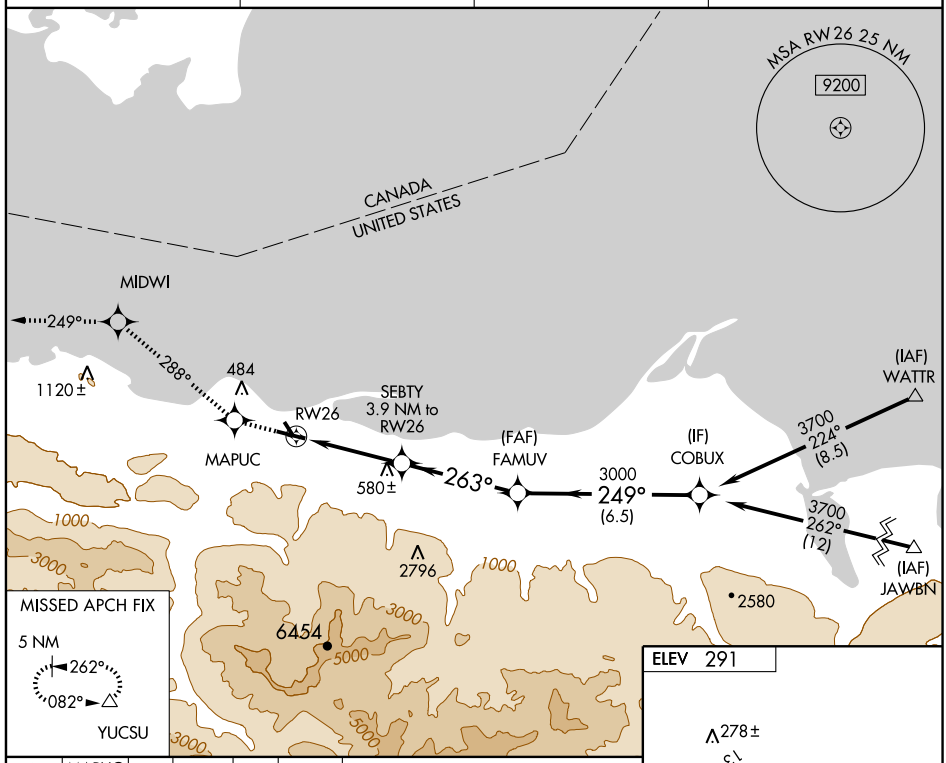
RNAV (GPS) RWY 26

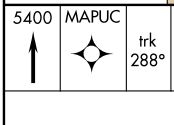
PORT ANGELES/ WILLIAM R. FAIRCHILD INTL (CLM)

Circling NA south of Rwy 8-26. DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA. When local altimeter setting not received, use Friday Harbor altimeter setting; increase all MDA 100 feet and visibility Cats B/C/D ½ mile.

MISSED APPROACH: Climb to 5400 direct MAPUC and via track 288° to MIDWI and via track 249° to YUCSU and hold.

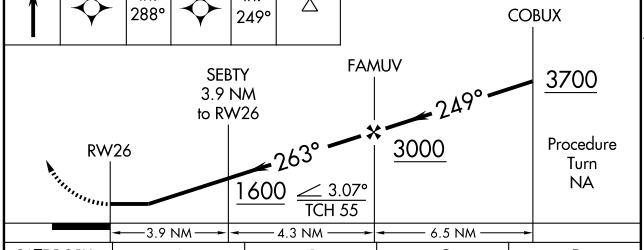
ASOS	WHIDBEY APP CON ★	CLNC DEL	UNICOM
135.175	118.2 285.65	124.15	122.975 (CTAF) Ⓛ

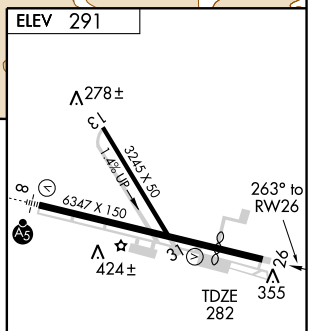




5400	MAPUC	trk 288°	MIDWI	trk 249°	YUCSU

VGSI and descent angles not coincident.





CATEGORY	A	B	C	D
LNAV MDA	940-1	658 (700-1)	940-1¾ 658 (700-1¾)	940-2 658 (700-1)
CIRCLING	940-1	649 (700-1)	940-1¾ 649 (700-1¾)	940-2 649 (700-2)

LIRL Rwy 13-31
MIRL Rwy 8-26 Ⓛ
REIL Rwy 26

NW-1, 14 JAN 2010 to 11 FEB 2010

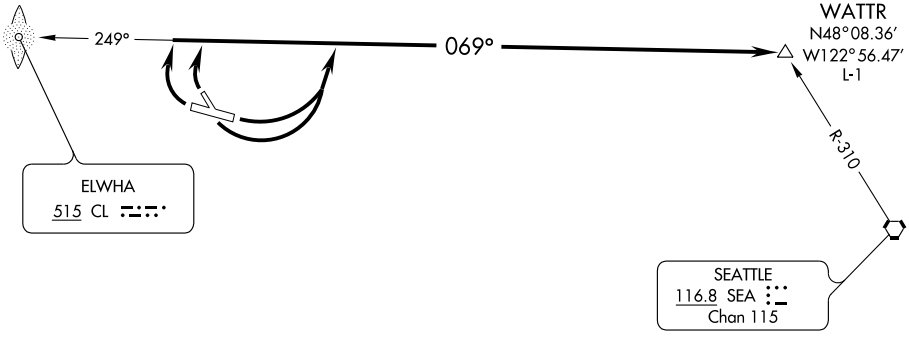
WATTR FIVE DEPARTURE (OBSTACLE)

NAS WHIDBEY DEP CON
118.2 285.65
SEATTLE RADIO
122.6
CTAF 123.0

VICTORIA
113.7 YYJ
Chan 84
N48°43.62' - W123°29.06'
L-1, H-1

TAKE-OFF OBSTACLE NOTES

Rwy 13: Multiple trees and pole beginning 1299' from DER, 32' left of centerline, up to 100' AGL/520' MSL.
Sign 76' from DER, 230' left of centerline, 5' AGL/276' MSL.
Hangar 1550' from DER, 457' left of centerline, 49' AGL/320' MSL.
OL on airport beacon 2023' from DER, 829' left of centerline, 74' AGL/345' MSL.
Multiple trees and pole beginning 614' from DER, 11' right of centerline, up to 100' AGL/599' MSL.
Rwy 26: Multiple trees beginning 2940' from DER, 747' left of centerline, up to 95' AGL/378' MSL.
Rwy 31: Multiple trees beginning 470' from DER, 39' left of centerline, up to 71' AGL/298' MSL.
Multiple trees beginning 640' from DER, 112' right of centerline, up to 63' AGL/290' MSL.
Rwy 8: Multiple trees and poles beginning 130' from DER, 261' left of centerline, up to 124' AGL/415' MSL.
Multiple trees and poles beginning 923' from DER, 111' right of centerline, up to 232' AGL/479' MSL.
Hangar 212' from DER, 523' right of centerline, 19' AGL/310' MSL.



TAKE-OFF MINIMUMS
Rwys 26, 31: Standard.
Rwy 13: Standard with minimum climb of 454' per NM to 1100.
Rwy 8: 300-1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8 and 13: Climbing left turn, thence....

TAKE-OFF RUNWAYS 26 and 31: Climbing right turn, thence....

....on 069° bearing from CL LOM to WATTR INT, maintain 5400.

NDB K 317	APP CRS 237°	Rwy Idg N/A TDZE N/A Apt Elev 13

COPTER NDB or GPS 237°

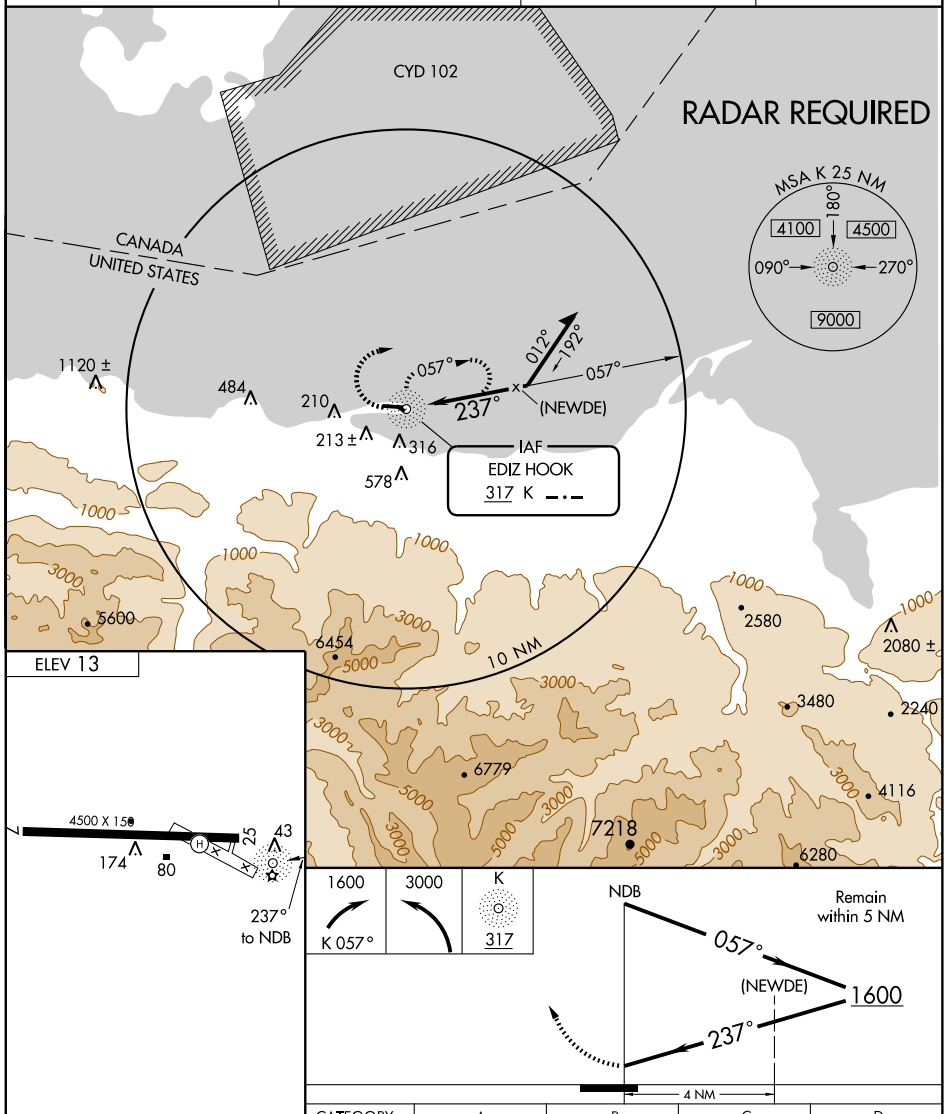
PORT ANGELES CGAS (NOW)

NA

Prior permission required.

MISSED APPROACH: Climbing right turn to 1600 via bearing 057° from Ediz Hook NDB, then climbing left turn to 3000 direct Ediz Hook NDB and hold.

WHIDBEY APP CON	PORT ANGELES AIR	CLNC DEL	UNICOM
118.2 285.65	127.7 345.0	124.15	122.975 (CTAF)



CATEGORY	A	B	C	D
H-237°	540-¾ 527 (600-¾)	NA		

MIRL Rwy 7-25

WAAS	APP CRS	Rwy Idg	6200
Chan 50129	051°	TDZE	2540
W05A		Apt Elev	2556

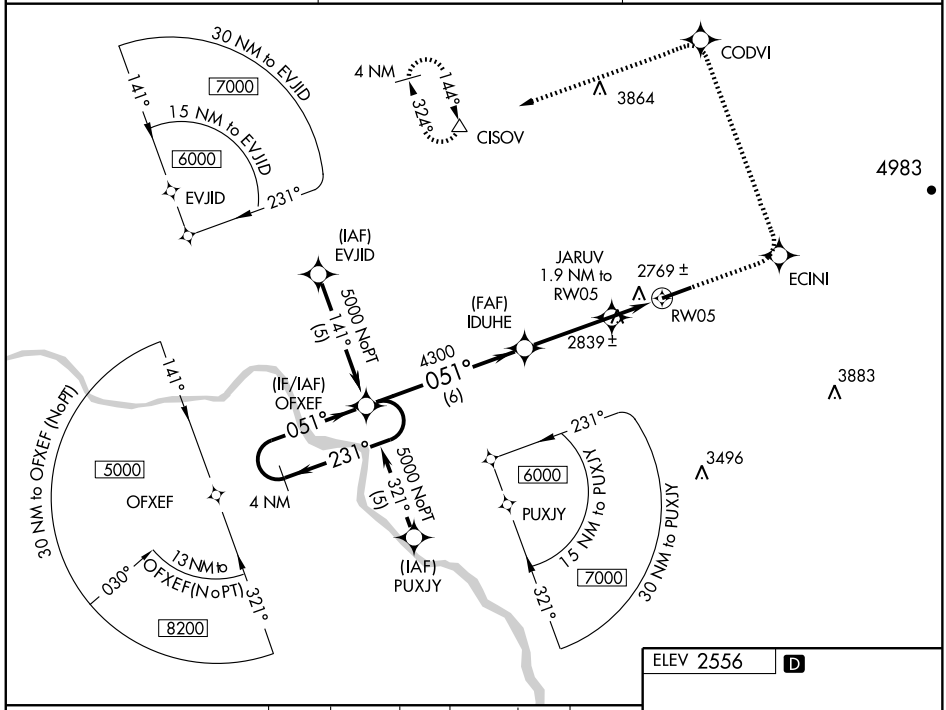
RNAV (GPS) RWY 5

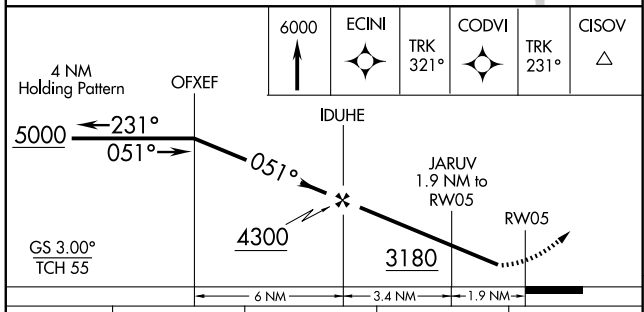
PULLMAN/MOSCOW RGNL (PUW)

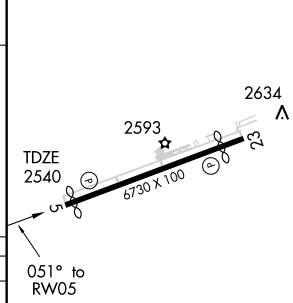
DME/DME RNP-0.3 NA.
Baro VNAV NA below -20°C (-4°F).

MISSED APPROACH: Climb to 6000 direct ECINI, and via 321° track to CODVI and via 231° track to CISOV and hold.

ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 282.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2981-1½ 441 (500-1½)			
LNAV/VNAV DA	3177-2¼ 637 (700-2¼)			
LNAV MDA	3100-1 560 (600-1)		3100-1½ 560 (600-1½)	3100-1¾ 560 (600-1¾)
CIRCLING	3220-2¼ 664 (700-2¼)			

HIRL Rwy 5-23 L
REIL Rwys 5 and 23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

PULLMAN/MOSCOW, WASHINGTON

AL-798 (FAA)

RNAV (GPS) RWY 23

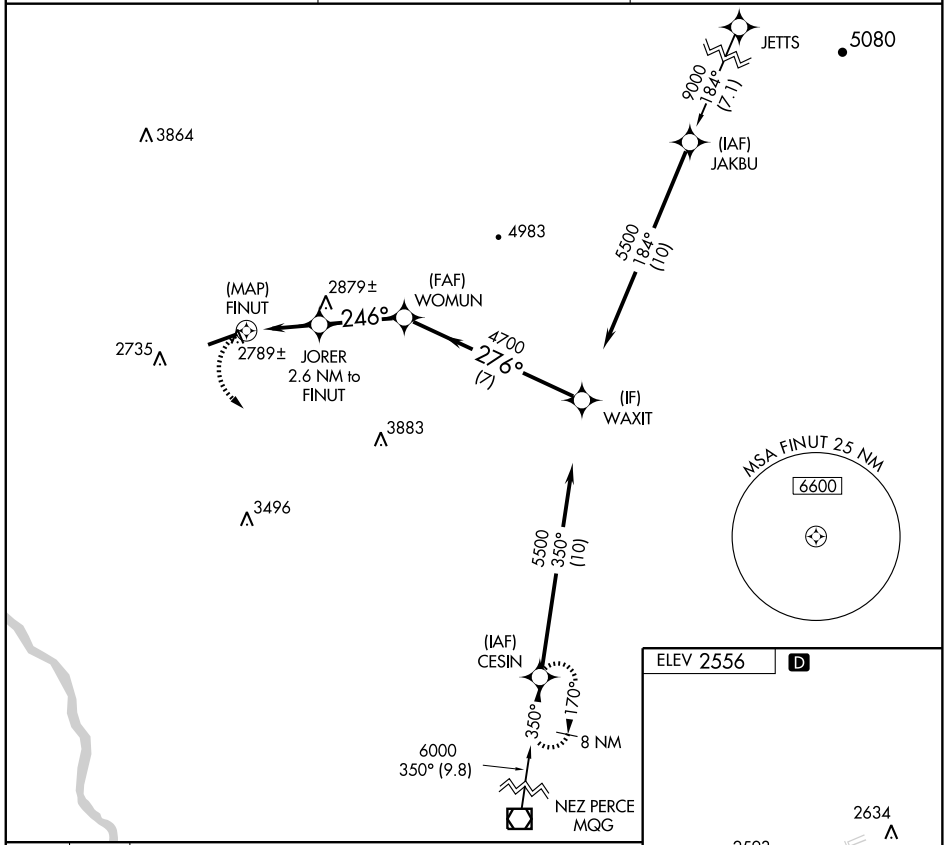
PULLMAN/MOSCOW RGNL (PUW)

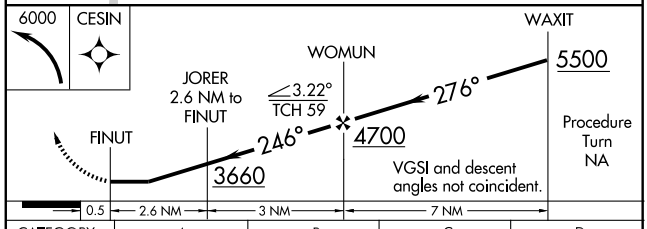
APP CRS		
246°	Rwy Idg	5240
	TDZE	2549
	Apt Elev	2556

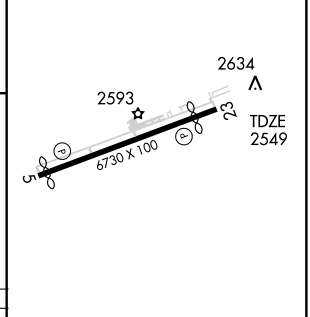
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 6000 direct CESIN and hold.

ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 282.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3180-1	631 (700-1)	3180-1 3/4 631 (700-1 3/4)	3180-2 631 (700-2)
CIRCLING	3220-1	664 (700-1)	3220-1 3/4 664 (700-1 3/4)	3220-2 664 (700-2)

HIRL Rwy 5-23 L
REIL Rwys 5 and 23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

PULLMAN/MOSCOW, WASHINGTON

AL-798 (FAA)

VOR/DME PUW	APP CRS	Rwy Idg	6200
109.0	026°	TDZE	2540
Chan 27		Apt Elev	2556

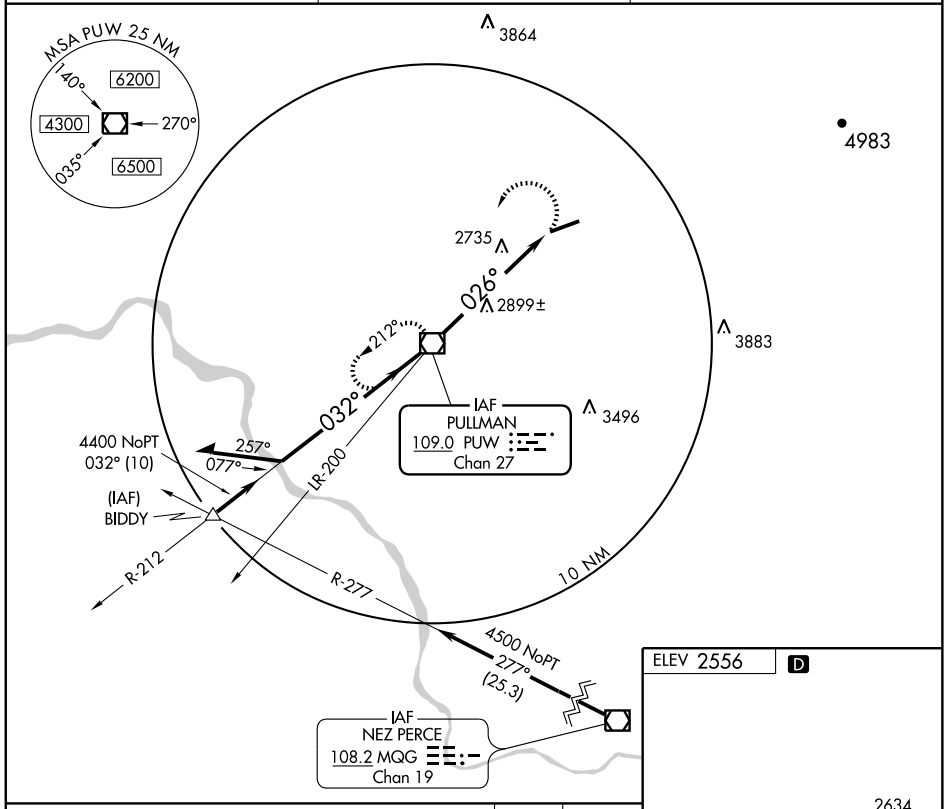
VOR RWY 5

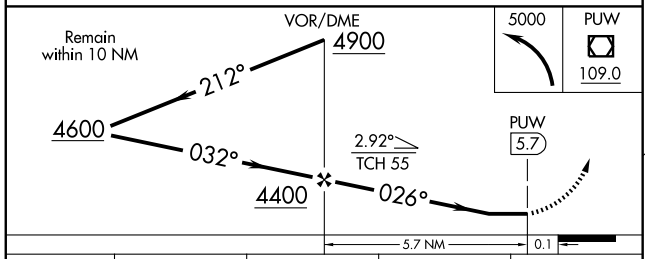
PULLMAN/MOSCOW RGNL (PUW)

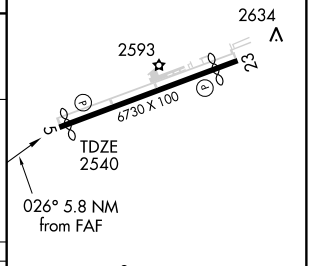
When VGSI inoperative, circling Rwy 5 NA at night. Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 5000 direct PUW VOR/DME and hold.

ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 282.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-5	3120-1	580 (600-1)	3120-1½ 580 (600-1½)	3120-1¾ 580 (600-1¾)
CIRCLING	3220-1	664 (700-1)	3220-1¾ 664 (700-1¾)	3220-2 664 (700-2)

HIRL Rwy 5-23 L

REIL Rwys 5 and 23 L

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	3650
342°	TDZE	538
	Apt Elev	538

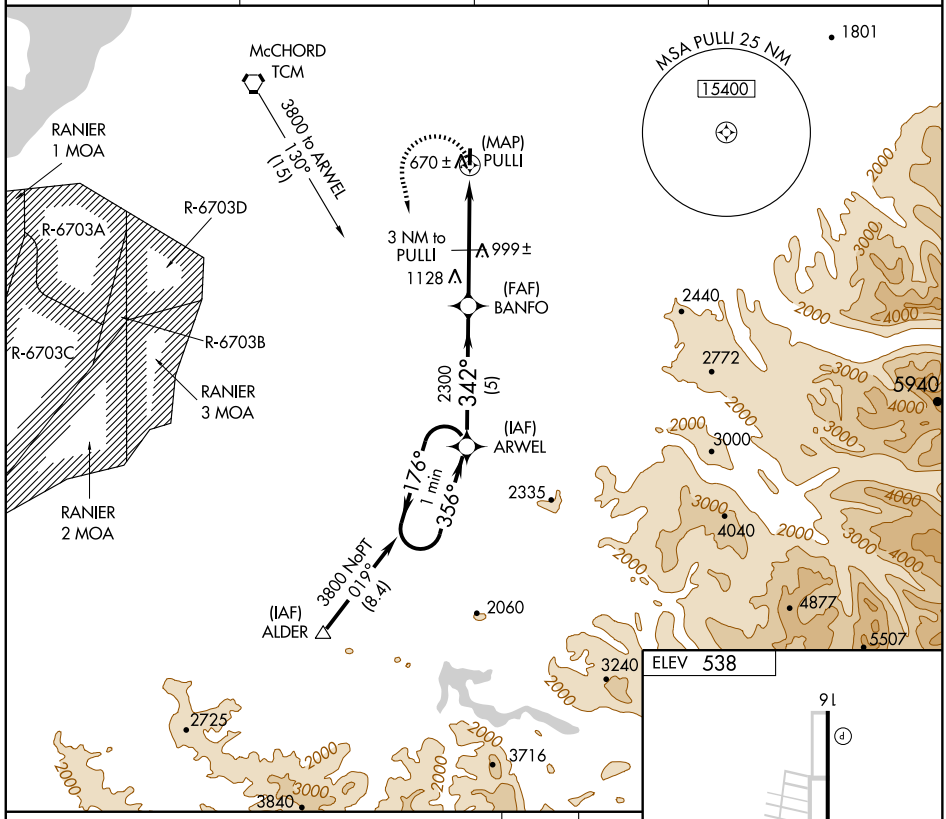
GPS RWY 34

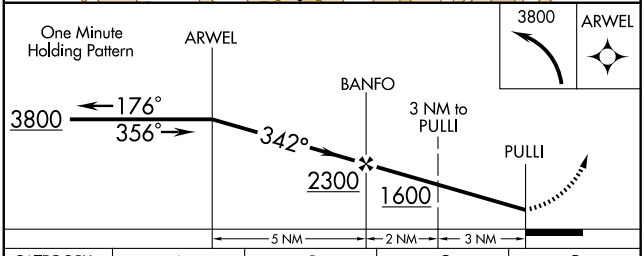
PUYALLUP/ PIERCE COUNTY-THUN FIELD (PLU)

NA

MISSED APPROACH: Climbing left turn to 3800 direct ARWEL WP and hold.

AWOS-3	SEATTLE APP CON	CLNC DEL	UNICOM
128.575	126.5 391.9	121.85	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-34	1200-1	662 (700-1)	NA	
CIRCLING	1200-1	662 (700-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

09239

AIRPORT DIAGRAM

AL-5396 (FAA)

RENTON MUNI (RNT)
RENTON, WASHINGTON

ATIS
126.95
RENTON TOWER ★
124.7 256.9
GND CON
121.6 256.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ELEV
24

16
9

156.3°

RWY 16-34
S100, D130, DT340

HANGARS

HANGARS

HANGARS

HANGARS

HANGAR

HANGAR

HANGARS

TWR

5382 X 200

336.3°

34

FIELD
ELEV
32

VAR 17.8° E

JANUARY 2005
ANNUAL RATE OF CHANGE
0.2° W

453 ±

47°30'N

47°29.5'N

47°29'N

122°13.5'W

122°13'W

122°12.5'W

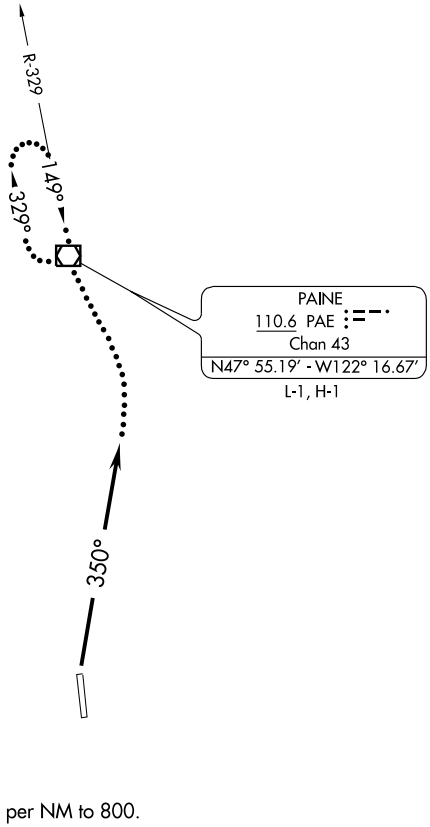
NW-1, 14 JAN 2010 to 11 FEB 2010

BELLEVUE TWO DEPARTURE

SL-5396 (FAA)

RENTON MUNI (RNT)
RENTON, WASHINGTON

ATIS 126.95
GND CON
121.6 256.9
RENTON TOWER ★
124.7 (CTAF) 256.9
SEATTLE DEP CON
119.2 284.7



NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwy 16: NA- ATC.
Rwy 34: Standard with minimum climb of 315′ per NM to 800.

TAKE-OFF OBSTACLE NOTES

Rwy 34: Trees and terrain beginning 1.6 NM from DER, 104′ left of centerline, up to 100′ AGL/485′ MSL, wood piling, trees and terrain beginning 75′ from DER, 7′ right of centerline, up to 100′ AGL/426′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34: Climb heading 350°, maintain 3000, expect radar vectors, expect filed altitude within 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Departure Control within 3 minutes after departure, climbing left turn direct PAE VOR/DME, continue climb-in PAE VOR/DME holding pattern to cross PAE VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NDB RNT	APP CRS	Rwy Idg	5082
353	156°	TDZE	25
		Apt Elev	32

NDB RWY 16

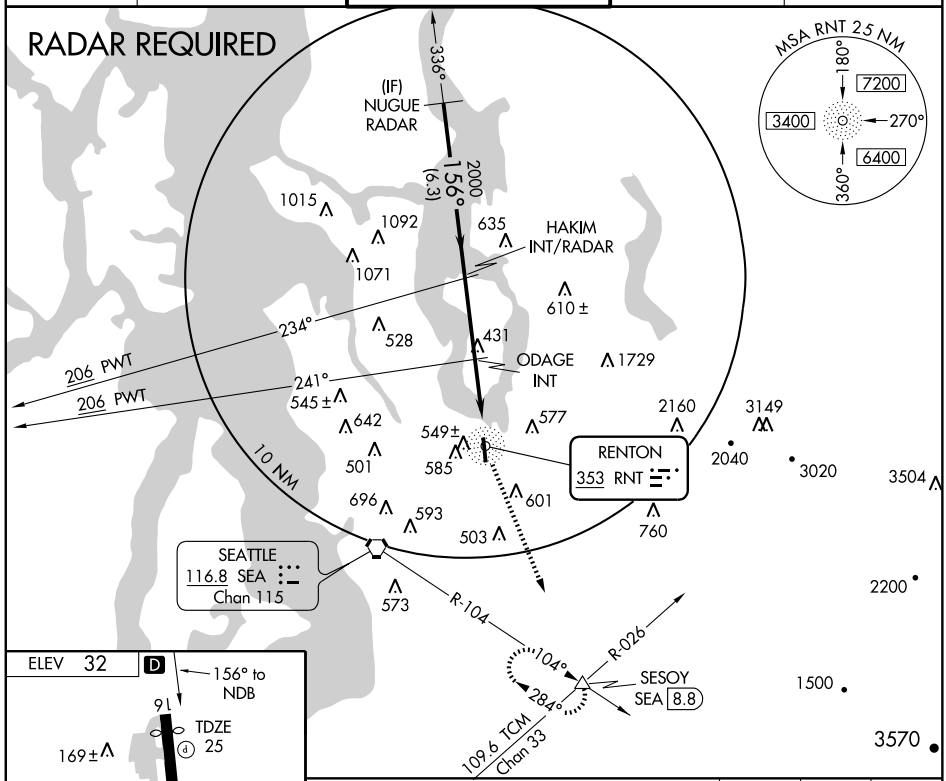
RENTON MUNI (RNT)

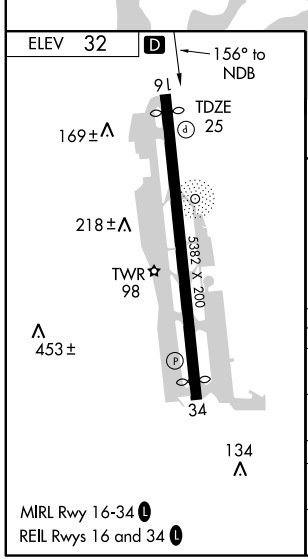
T A Circling NA W of Rwy 16-34. Visibility reduction by helicopters NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting.

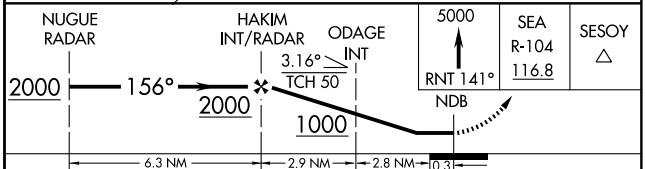
MISSED APPROACH: Climb to 5000 via 141° bearing from RNT NDB and SEA VORTAC R-104 to SESOY INT and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	RENTON TOWER★	GND CON	UNICOM
126.95	119.2 284.7	124.7 (CTAF) L 256.9	121.6 256.9	122.95

RADAR REQUIRED

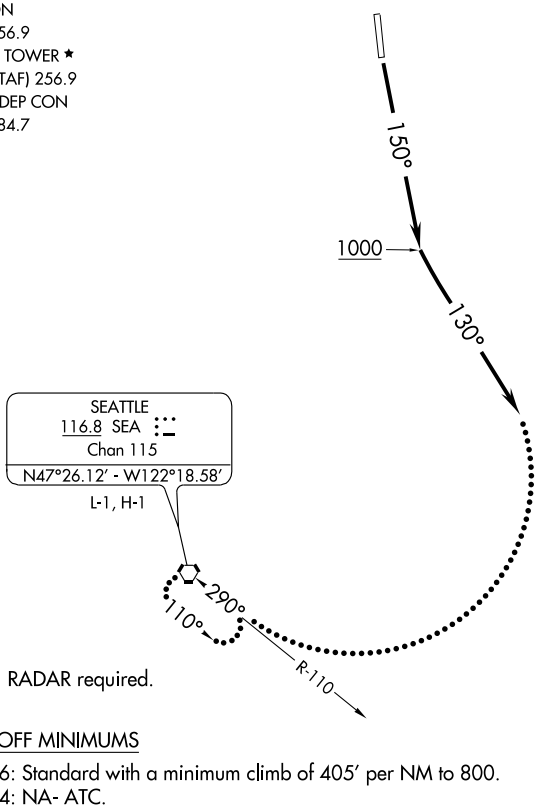






CATEGORY	A	B	C	D
S-16	1000-1¼ 975 (1000-1¼)	1000-1½ 975 (1000-1½)	1000-3	975 (1000-3)
CIRCLING	1000-1¼ 968 (1000-1¼)	1000-1½ 968 (1000-1½)	1000-3	968 (1000-3)
ODAGE FIX MINIMUMS (DUAL ADF RECEIVERS REQUIRED)				
S-16	900-1 875 (900-1)	900-1¼ 875 (900-1¼)	900-2½ 875 (900-2½)	900-2¾ 875 (900-2¾)
CIRCLING	900-1 868 (900-1)	900-1¼ 868 (900-1¼)	920-2¾ 888 (900-2¾)	920-3 888 (900-3)

ATIS 126.95
GND CON
121.6 256.9
RENTON TOWER ★
124.7 (CTAF) 256.9
SEATTLE DEP CON
119.2 284.7



NOTE: RADAR required.

TAKE-OFF MINIMUMS

Rwy 16: Standard with a minimum climb of 405′ per NM to 800.
Rwy 34: NA- ATC.

TAKE-OFF OBSTACLE NOTES

Rwy 16: Trees, towers, lights and blast shield beginning 186′ from DER, 4′ left of centerline, up to 100′ AGL/574′ MSL. Trees, lights and signs beginning 40′ from DER, 54′ right of centerline, up to 100′ AGL/297′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb heading 150° to 1000, then climbing left turn heading 130°, expect radar vectors, maintain 3000, expect filed altitude within 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Departure Control within 3 minutes after departure, climbing right turn direct SEA VORTAC, continue climb-in SEA VORTAC holding pattern to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding on course.

APP CRS	Rwy Idg	5082
157°	TDZE	25
	Apt Elev	32

RNAV (GPS) Y RWY 16

RENTON MUNI (RNT)

Circling NA W of Rwy 16-34. DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting.

MISSED APPROACH: Climb to 5000 direct CUPAT and via track 107° to SESOY and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	RENTON TOWER★	GND CON	UNICOM
126.95	119.2 284.7	124.7 (CTAF) L 256.9	121.6 256.9	122.95

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

(IAF) PAINE PAE
2000
158° (14.6)

(IF) LUTSY
2000
253° (6)
(IAF) HAVHO

RADAR required for transition to HAVHO.

157° (6)
1600

(FAF) BLEIR
610±

(MAP) TOYOL

CUPAT
107°
106°
286°
5 NM
SESOY

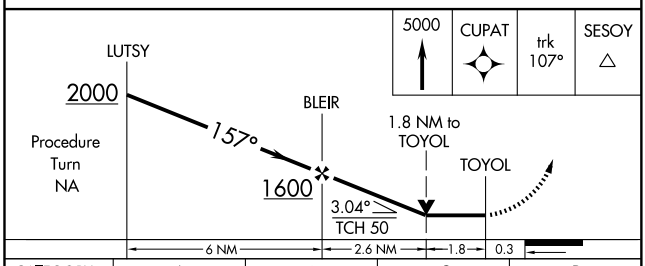
MSA TOYOL 25 NM
7200

1015 1092 1071 528 431 1729 545± 485± 642 501 585 577 2160 3149 2040 3020 3504 696 593 601 760 503 573 2200 1500 3570

ELEV 32 D

9L TDZE 25
169±
218±
TWR 98
5382 X 200
453±
34
134

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
LNAV MDA	760-1 735 (800-1)		760-2 735 (800-2)	760-2¼ 735 (800-2¼)
CIRCLING	880-1 848 (900-1)	880-1¼ 848 (900-1¼)	920-2¾ 888 (900-2¾)	920-3 888 (900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 93610 W16A	APP CRS 157°	Rwy Idg 5082 / TDZE 25 / Apt Elev 32

RNAV (GPS) Z RWY 16

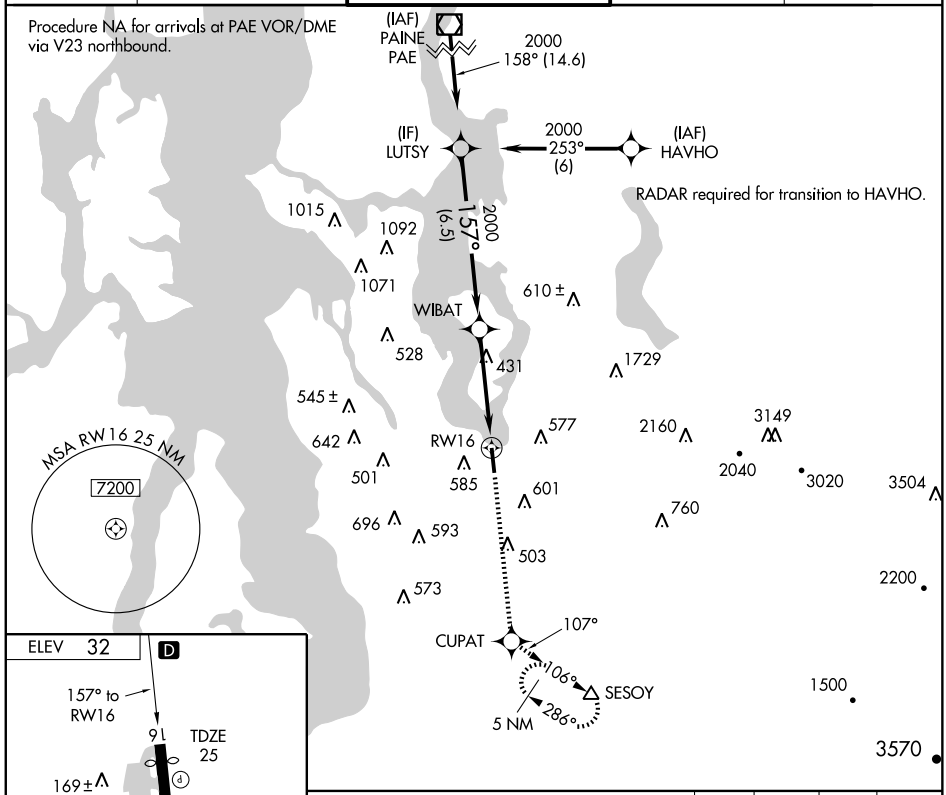
RENTON MUNI (RNT)

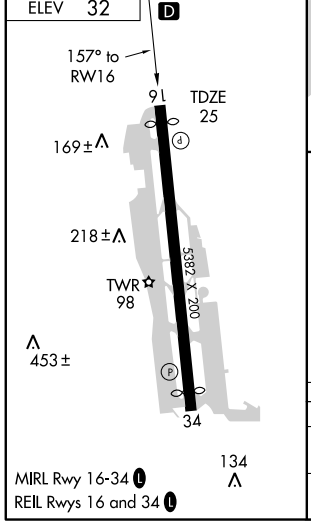
Circling NA W of Rwy 16-34. DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting. Circling requires descent on GS to CMDA.

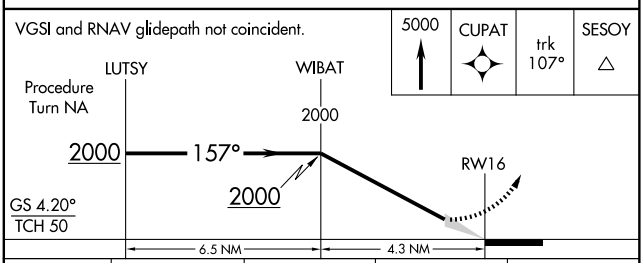
MISSED APPROACH: Climb to 5000 direct CUPAT and via track 107° to SESOY and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	RENTON TOWER★	GND CON	UNICOM
126.95	119.2 284.7	124.7 (CTAF) L 256.9	121.6 256.9	122.95

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.







CATEGORY	A	B	C	D
LPV DA	542-1¼ 517 (600-1¼)		NA	
CIRCLING	880-1¼ 848 (900-1¼)		NA	

LOC/DME I-RLD	APP CRS	Rwy Idg	4009
110.5	189°	TDZE	390
Chan 42		Apt Elev	394

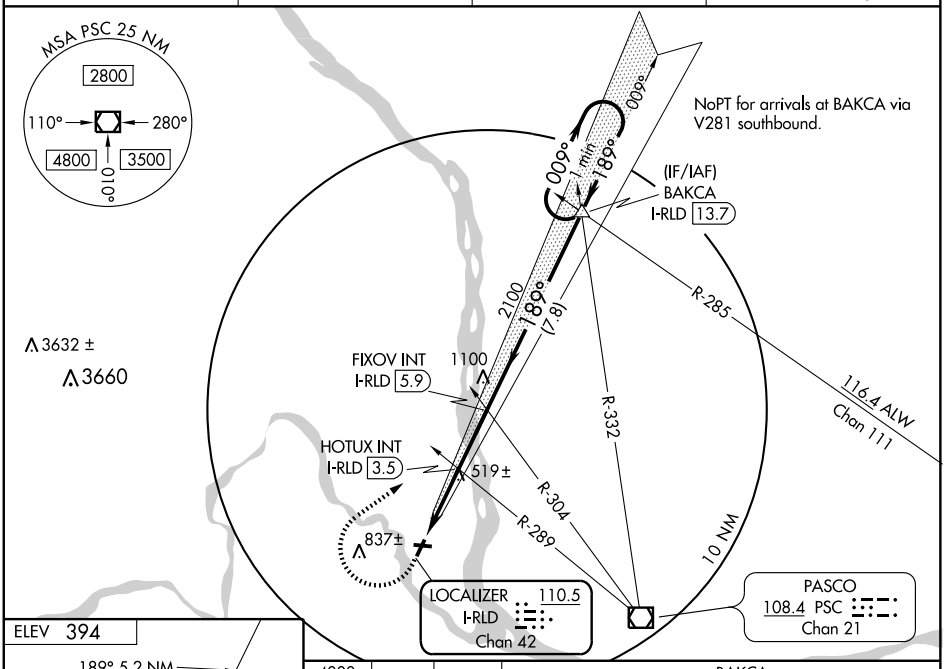
LOC RWY 19
RICHLAND (RLD)

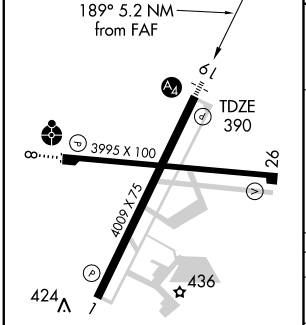
NA
Visibility reduction by helicopters NA.
VDP NA when using Pasco altimeter setting.
When local altimeter setting not received, use Pasco altimeter setting and increase all MDA 40 feet.
Inoperative table does not apply to S-19 all Cats, and HOTUX fix minimums S-19 Cat C.

MALS

MISSED APPROACH: Climbing right turn to 4000 via heading 038° and I-RLD NE course to BAKCA INT/I-RLD 13.7 DME and hold.

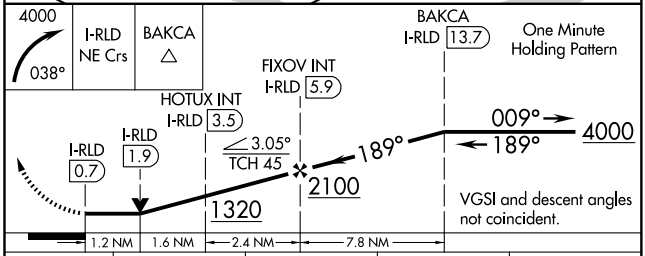
AWOS-3	CHINOOK APP CON ★	CLNC DEL	UNICOM
132.675	128.75 377.2	122.4	122.7 (CTAF) L





REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D
S-19	1320-1¼ 930 (1000-1¼)		1320-2¾ 930 (1000-2¾)	1320-3 930 (1000-3)
CIRCLING	1320-1¼ 926 (1000-1¼)		1320-2¾ 926 (1000-2¾)	1320-3 926 (1000-3)
HOTUX FIX MINIMUMS				
S-19	800-¾ 410 (500-¾)		800-1¼ 410 (500-1¼)	1100-2¼ 710 (800-2¼)
CIRCLING	980-1 586 (600-1)	1000-1 606 (700-1)	1000-1¾ 606 (700-1¾)	1140-2½ 746 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

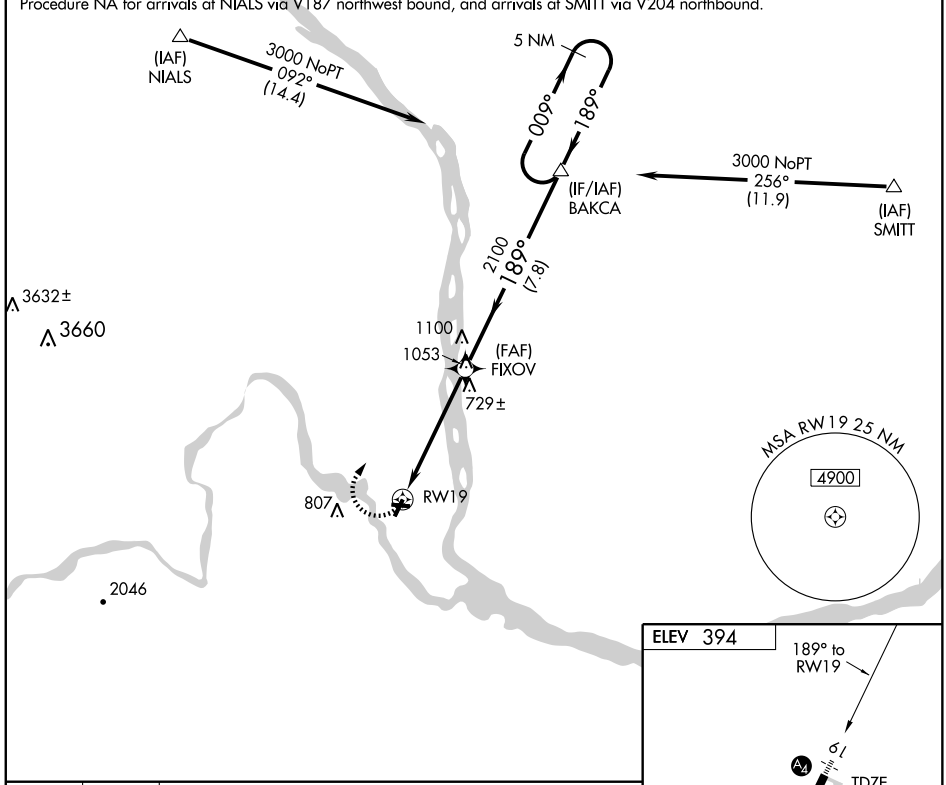
APP CRS	Rwy Idg	4009
189°	TDZE	390
	Apt Elev	394

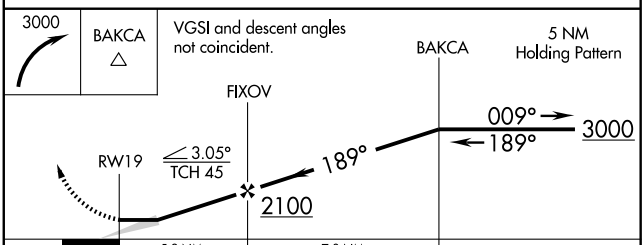
RNAV (GPS) RWY 19
RICHLAND (RLD)

DME/DME-RNP-0.3 NA. Inoperative table does not apply to Cat. C.	MALS	MISSED APPROACH: Climbing right turn to 3000 direct BAKCA and hold.

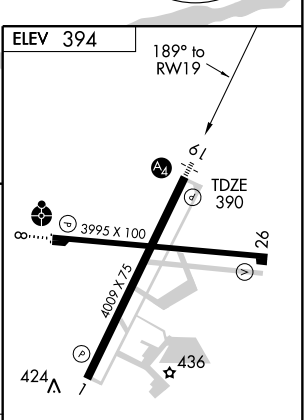
AWOS-3	CHINOOK APP CON ★	CLNC DEL	UNICOM
132.675	128.75 377.2	122.4	122.7 (CTAF) L

Procedure NA for arrivals at NIALS via V187 northwest bound, and arrivals at SMITT via V204 northbound.





CATEGORY	A	B	C	D
LNAV MDA	1000-¾ 610 (700-¾)		1000-1¾ 610 (700-1¾)	1180-2½ 790 (800-2½)
CIRCLING	1000-1 606 (700-1)		1000-1¾ 606 (700-1¾)	1180-2½ 786 (800-2½)



REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS Chan **50299** W26A	APP CRS **259°**	Rwy Idg **3995** TDZE **389** Apt Elev **394**

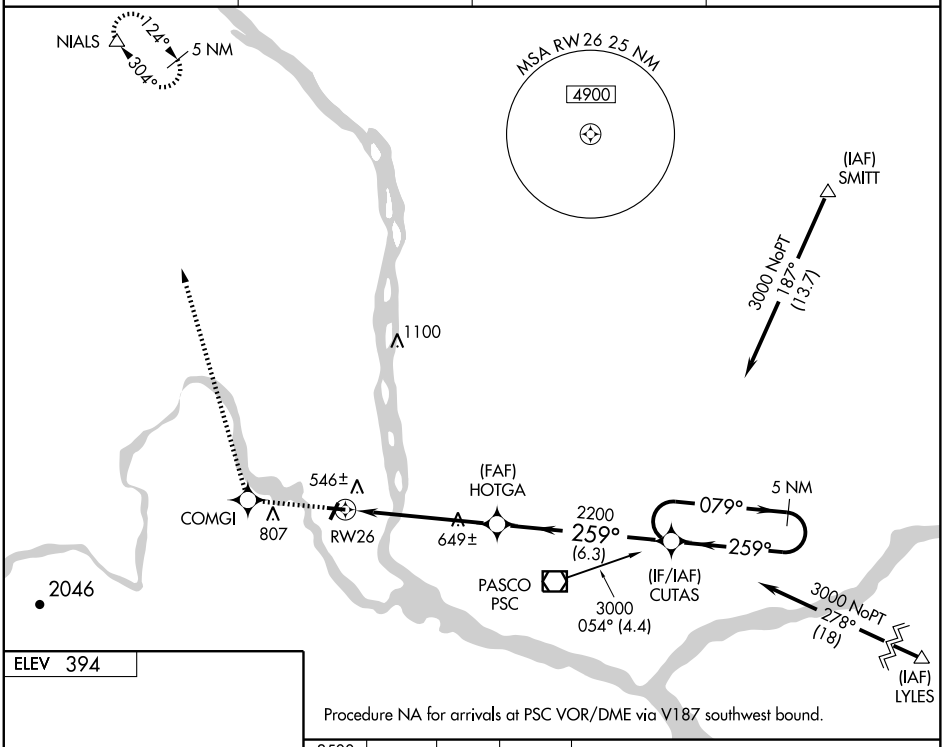
RNAV (GPS) RWY 26

RICHLAND (RLD)

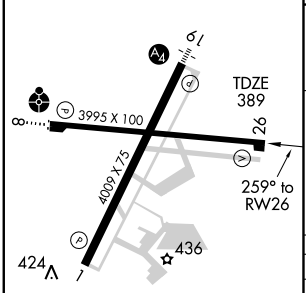
DME/DME RNP-0.3 NA. Baro-VNAV NA.

MISSED APPROACH: Climb to 3500 direct COMGI and via 327° track to NIALS and hold.

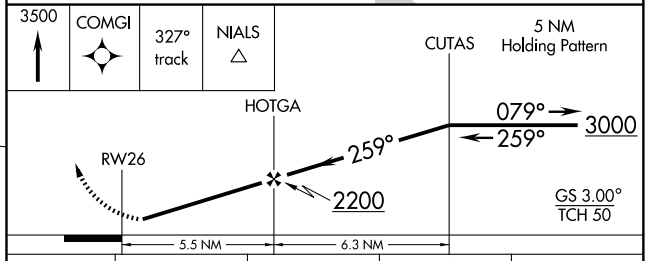
AWOS-3	CHINOOK APP CON ★	CLNC DEL	UNICOM
132.675	**128.75 377.2**	**122.4**	**122.7** (CTAF) L



Procedure NA for arrivals at PSC VOR/DME via V187 southwest bound.



REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26



CATEGORY	A	B	C	D
LPV DA	676-1 287 (300-1)			
LNAV/VNAV DA	945-2 556 (600-2)			
LNAV MDA	920-1 531 (600-1)		920-1½ 531 (600-1½)	920-1¾ 531 (600-1¾)
CIRCLING	1000-2 606 (700-2)			1140-2½ 746 (800-2½)

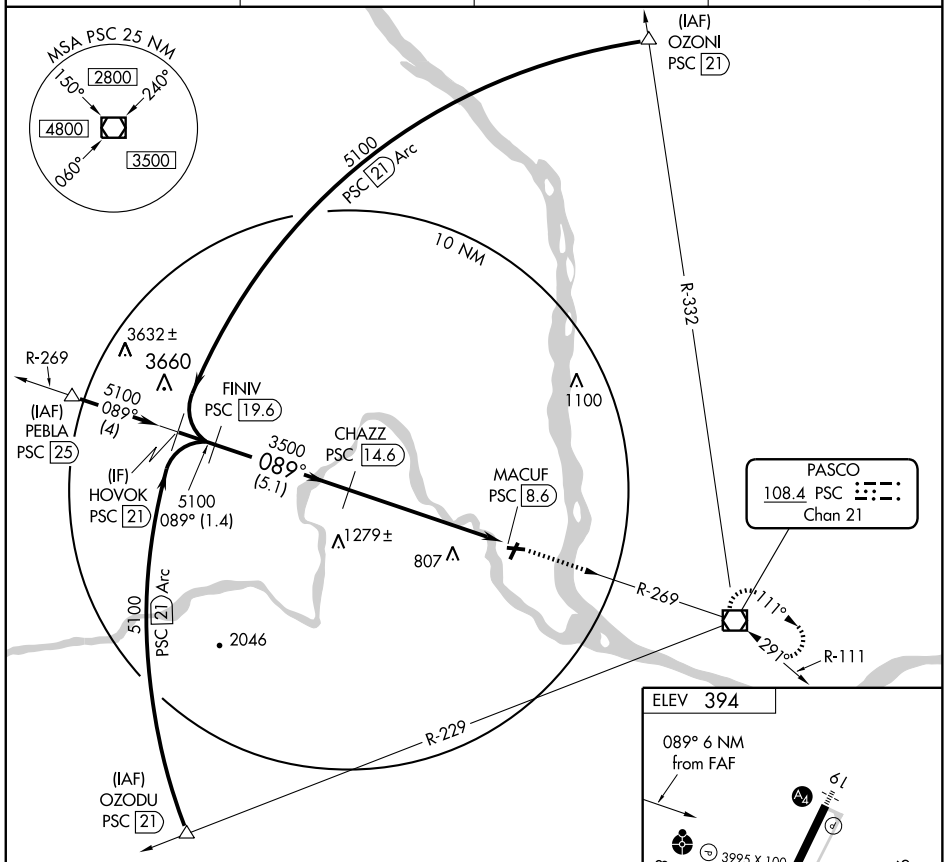
NW-1, 14 JAN 2010 to 11 FEB 2010

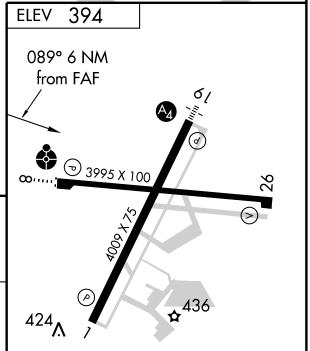
VOR/DME PSC 108.4 Chan 21	APP CRS 089°	Rwy Idg N/A TDZE N/A Apt Elev 394

VOR/DME-A
RICHLAND (RLD)

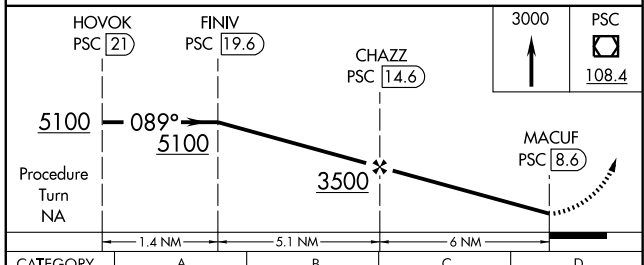
MISSED APPROACH: Climb to 3000 direct PSC VOR/DME and hold.

AWOS-3	CHINOOK APP CON ★	CLNC DEL	UNICOM
132.675	128.75 377.2	122.4	122.7 (CTAF) L





REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26



CATEGORY	A	B	C	D
CIRCLING	1280-1¼ 886 (900-1¼)		1280-2¾ 886 (900-2¾)	1280-3 886 (900-3)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

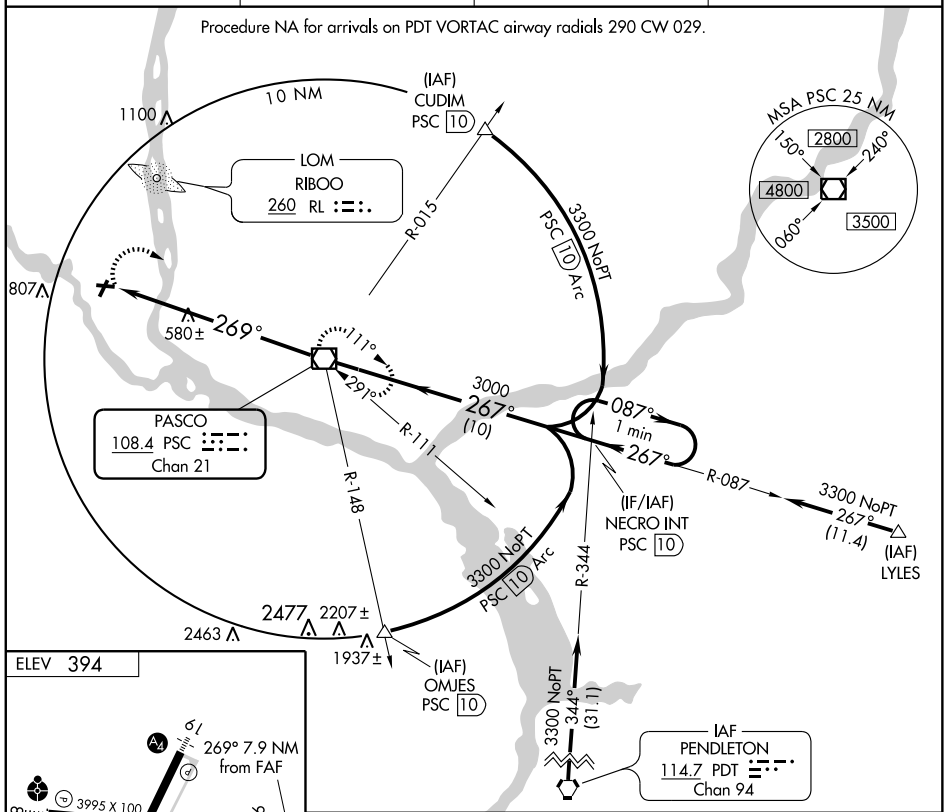
VOR/DME PSC 108.4 Chan 21	APP CRS 269°	Rwy Idg 3995 TDZE 389 Apt Elev 394

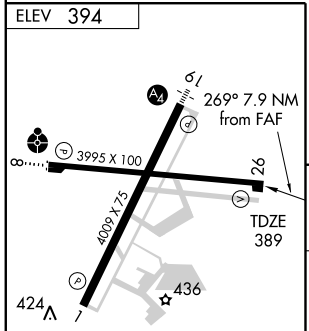
VOR RWY 26
RICHLAND (RLD)

MISSED APPROACH: Climbing right turn to 3000 direct PSC VOR/DME and hold.

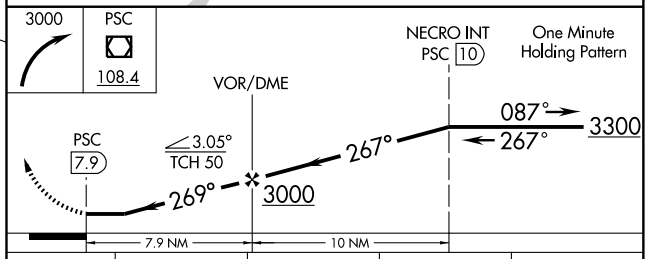
AWOS-3	CHINOOK APP CON ★	CLNC DEL	UNICOM
132.675	128.75 377.2	122.4	122.7 (CTAF) L

Procedure NA for arrivals on PDT VORTAC airway radials 290 CW 029.





REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26



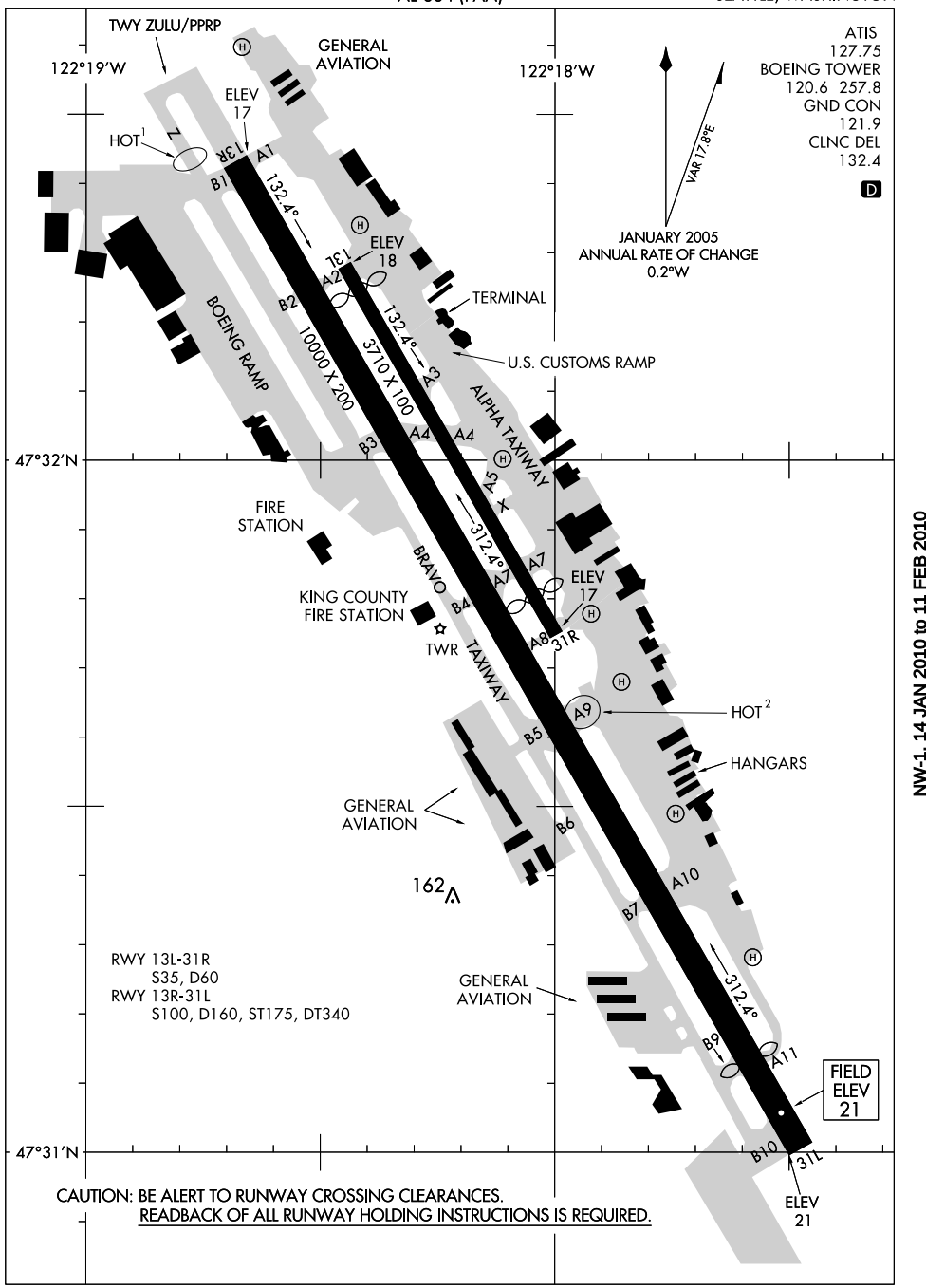
FAF to MAP 7.9 NM					
Knots	60	90	120	150	180
Min:Sec	7:54	5:16	3:57	3:10	2:38

CATEGORY	A	B	C	D
S-26	1000-1	611 (700-1)	1000-1¾ 611 (700-1¾)	1000-2 611 (700-2)
CIRCLING	1000-1	606 (700-1)	1000-1¾ 606 (700-1¾)	1140-2½ 746 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

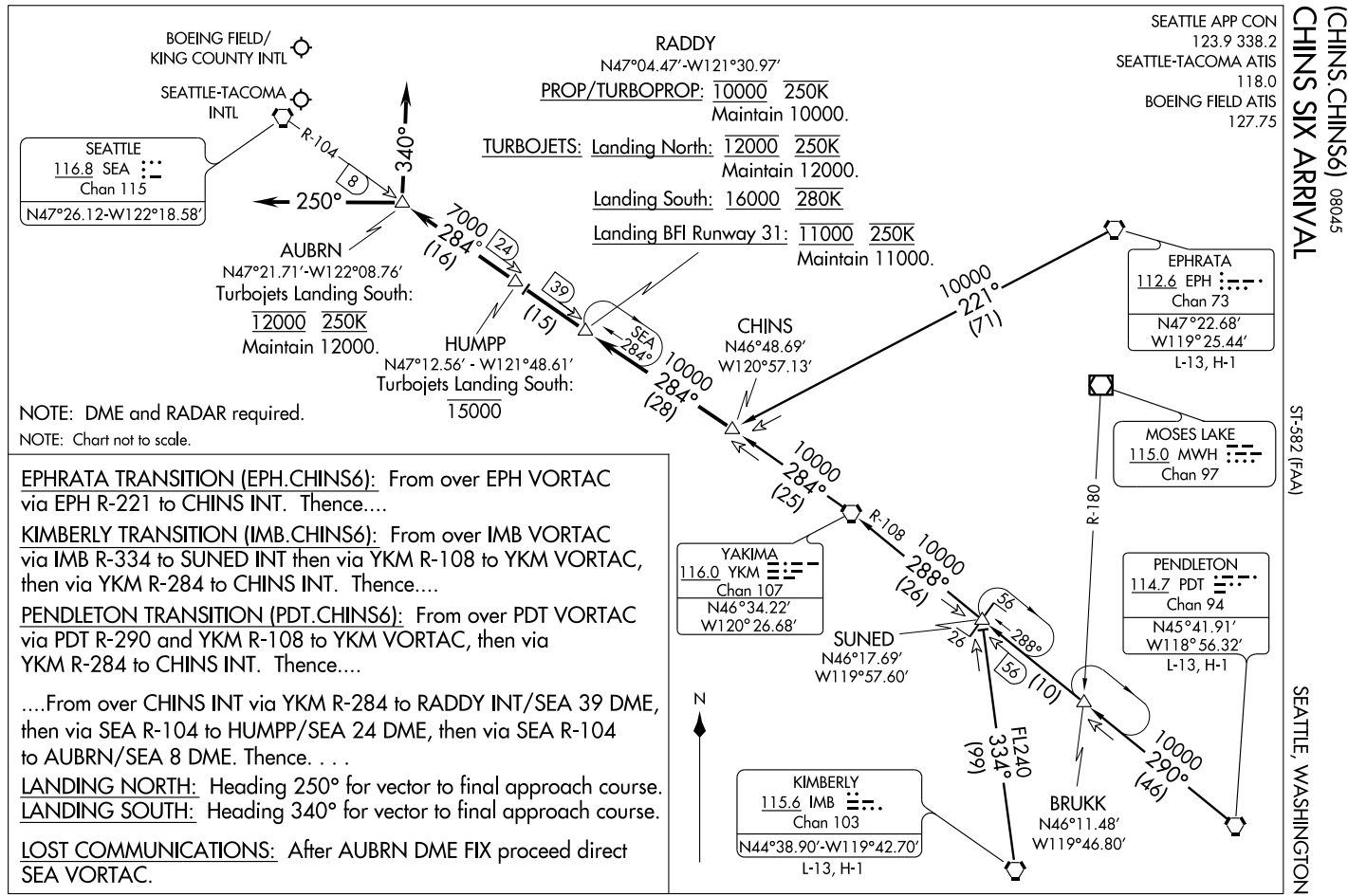
AIRPORT DIAGRAM

SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)
AL-384 (FAA)
SEATTLE, WASHINGTON



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010



EPHRATA TRANSITION (EPH.CHINS6): From over EPH VORTAC via EPH R-221 to CHINS INT. Thence....

KIMBERLY TRANSITION (IMB.CHINS6): From over IMB VORTAC via IMB R-334 to SUNED INT then via YKM R-108 to YKM VORTAC, then via YKM R-284 to CHINS INT. Thence....

PENDLETON TRANSITION (PDT.CHINS6): From over PDT VORTAC via PDT R-290 and YKM R-108 to YKM VORTAC, then via YKM R-284 to CHINS INT. Thence....

....From over CHINS INT via YKM R-284 to RADDY INT/SEA 39 DME, then via SEA R-104 to HUMPP/SEA 24 DME, then via SEA R-104 to AUBRN/SEA 8 DME. Thence. . . .

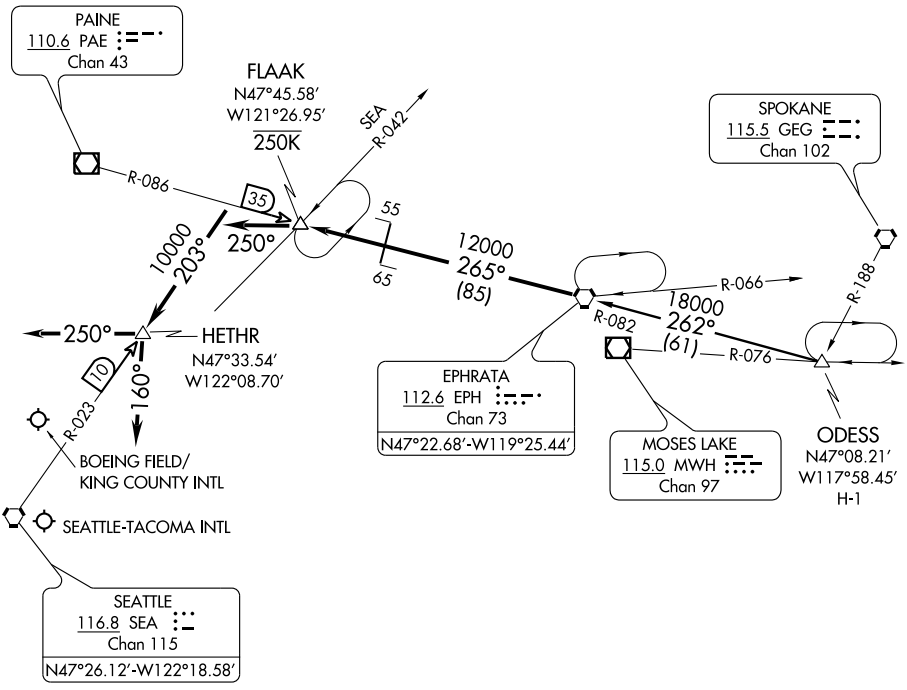
LANDING NORTH: Heading 250° for vector to final approach course.

LANDING SOUTH: Heading 340° for vector to final approach course.

LOST COMMUNICATIONS: After AUBRN DME FIX proceed direct SEA VORTAC.

EPHRATA SIX ARRIVAL

SEATTLE APP CON
123.9 338.2
SEATTLE-TACOMA ATIS
118.0
BOEING FIELD ATIS
127.75



NOTE: DME and RADAR required.

ODESS TRANSITION (ODESS.EPH6): From over ODESS INT via EPH R-082 to EPH VORTAC. Thence....

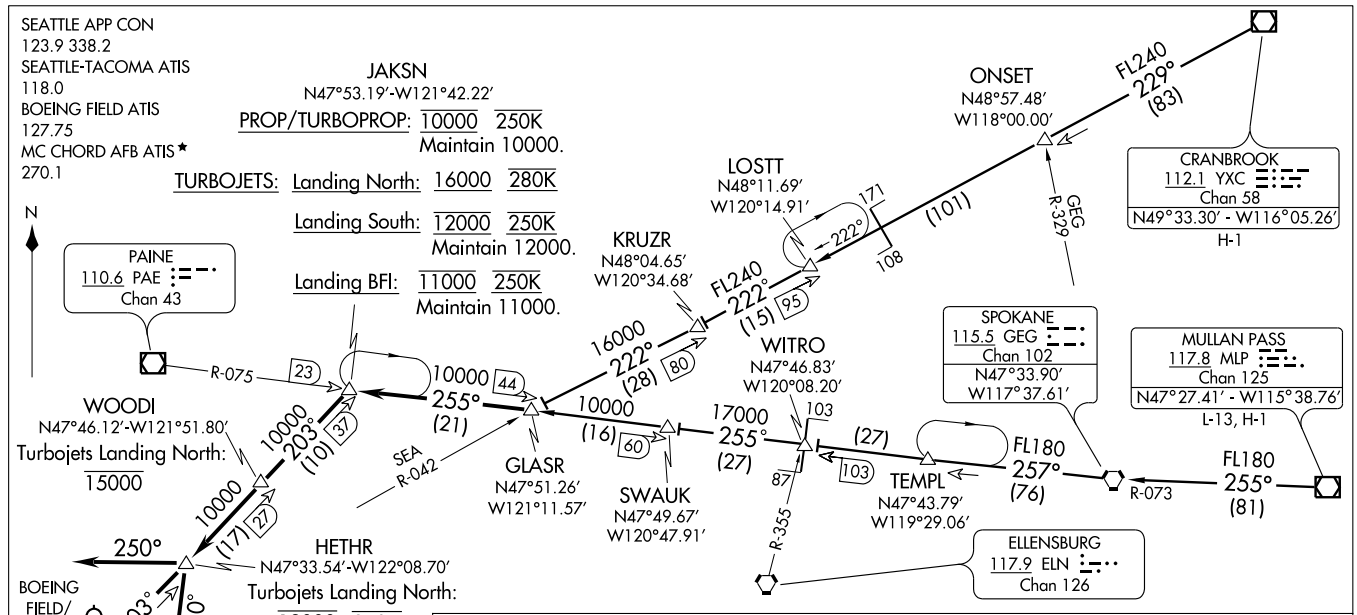
....From over EPH VORTAC via EPH R-265 and PAE R-086 to FLAAK INT. Then via heading 250° to intercept the SEA R-023, then via SEA R-023 to HETHR INT, thence....

LANDING NORTH: Heading 160° for vector to final approach course;
LANDING SOUTH: Heading 250° for vector to final approach course.

LOST COMMUNICATIONS: From over HETHR DME proceed direct SEA VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

GLASR SEVEN ARRIVAL



NOTE: Chart not to scale.

NOTE: DME and RADAR required.

CRANBROOK TRANSITION (YXC.GLASR7): From over YXC VOR/DME via YXC R-229 and SEA R-042 to GLASR INT. Thence....

MULLAN PASS TRANSITION (MLP.GLASR7): From over MLP VOR/DME via MLP R-255 and GEG R-073 to GEG VORTAC, then via GEG R-257 and PAE R-075 to GLASR INT. Thence....

....from over GLASR/PAE 44 DME via PAE R-075 to JAKSN INT/PAE 23 DME, then via the SEA R-023 to WOODI/SEA 27 DME, then via SEA R-023 to HETHR/SEA 10 DME, Thence....

LANDING NORTH: Heading 160° for vectors to final approach course.

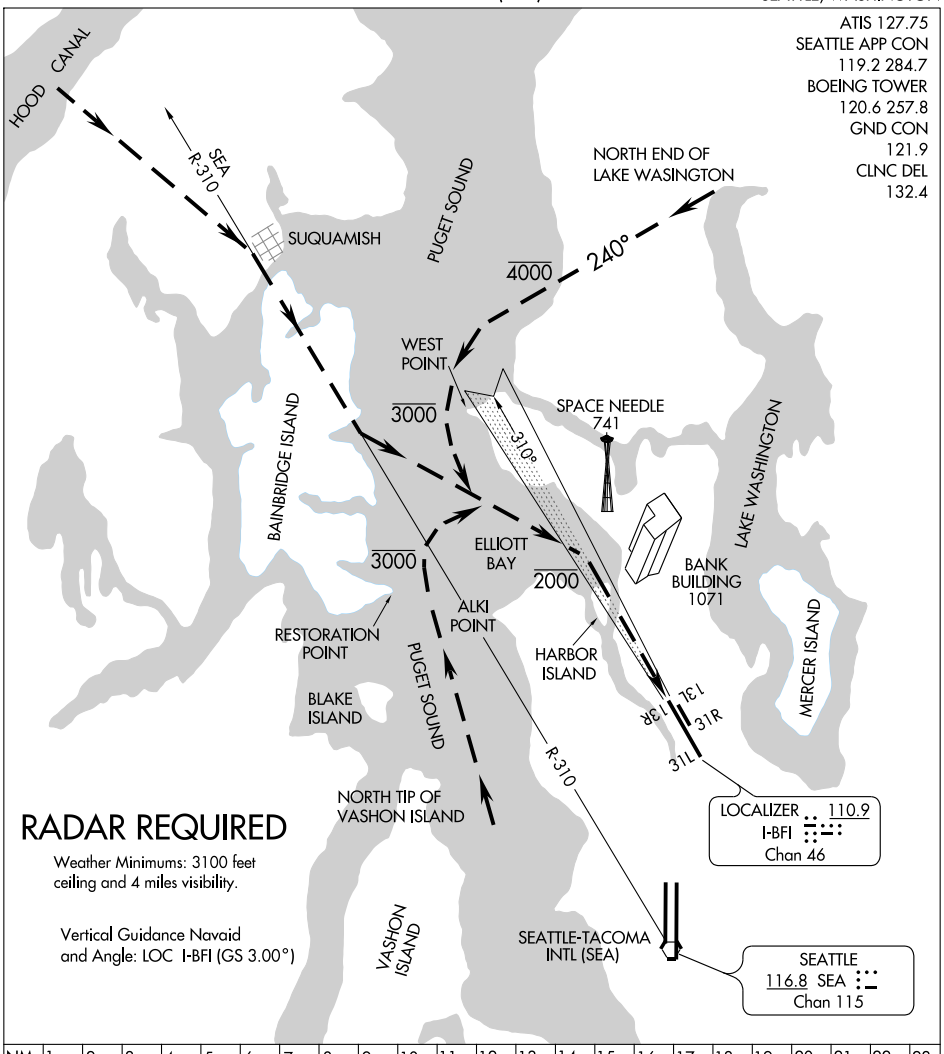
LANDING SOUTH: Heading 250° for vectors to final approach course.

LANDING McCHORD AFB: From over HETHR DME FIX, proceed direct SEA VORTAC.

LOST COMMUNICATIONS: From over HETHR DME FIX, proceed direct SEA VORTAC.

HARBOR VISUAL RWY 13R

SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)
AL-384 (FAA)
SEATTLE, WASHINGTON



HARBOR VISUAL APPROACH RWY 13R

Expect radar vectors from the Northwest, over the Hood Canal on the SEA R-310; from the North and Northeast, to the north end of Lake Washington; from the Southwest, South and Southeast, to Puget Sound abeam the north tip of Vashon Island. When cleared for the Harbor Visual Approach Runway 13R, proceed via the depicted routes over the middle of Puget Sound and Elliott Bay to Harbor Island and complete a straight in visual approach to Boeing Field/King County Intl Airport (BFI). Adherence to the recommended altitudes is strongly recommended to reduce the incidence of TCAS alarms. Visual approaches to Seattle-Tacoma Intl Airport (SEA) may be conducted simultaneously through Elliott Bay. It is essential that all aircraft remain in the center of Elliot Bay for noise abatement.

LOC/DME I-BFI	APP CRS	Rwy Idg	9120
110.9	130°	TDZE	18
Chan 46		Apt Elev	21

ILS RWY 13R

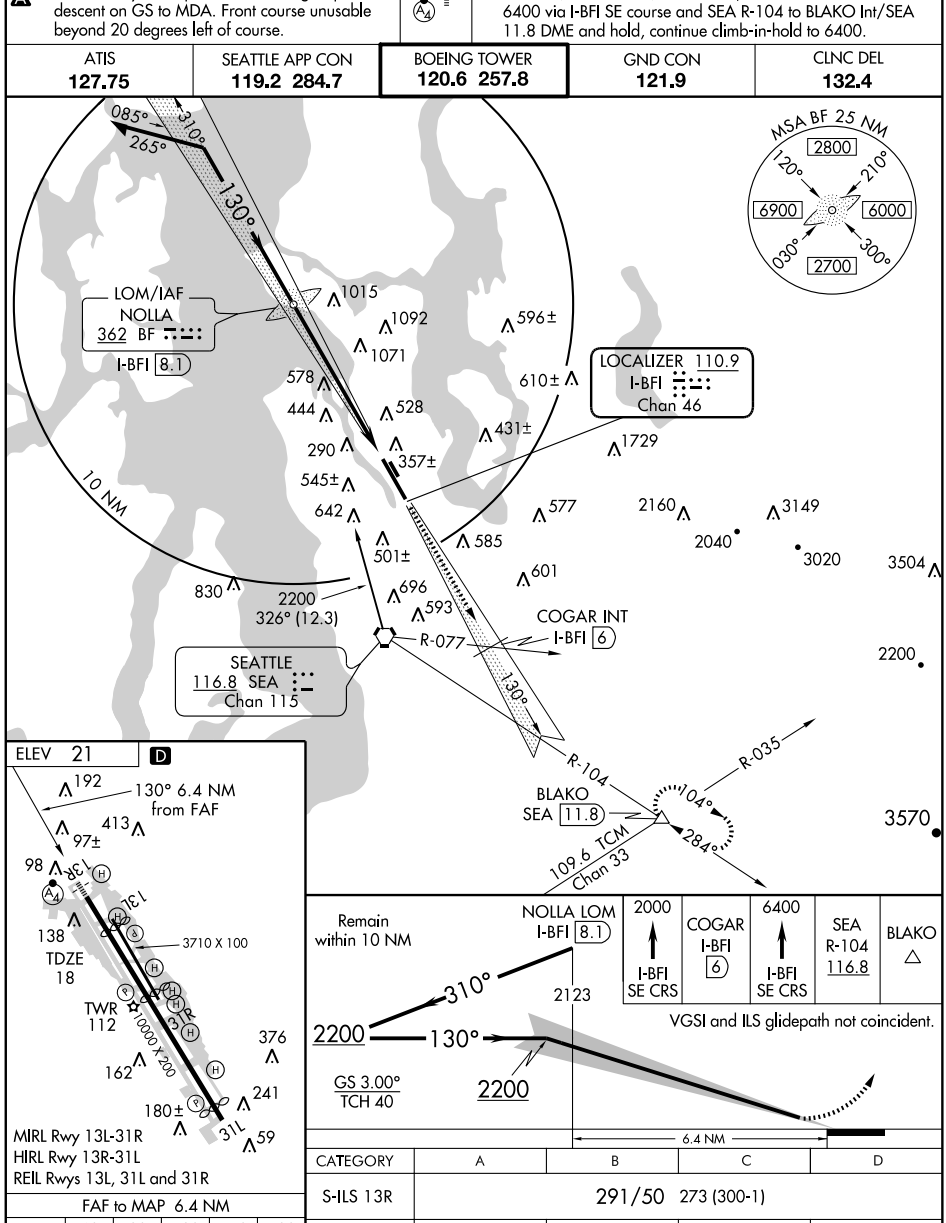
SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)

Inoperative table does not apply. Visibility reduction by helicopters NA. Circling requires descent on GS to MDA. Front course unusable beyond 20 degrees left of course.

MALSF

MISSED APPROACH: Climb to 2000 via I-BFI SE course to COGAR/I-BFI 6 DME/SEA R-077, then continue climb to 6400 via I-BFI SE course and SEA R-104 to BLAKO Int/SEA 11.8 DME and hold, continue climb-in-hold to 6400.

ATIS	SEATTLE APP CON	BOEING TOWER	GND CON	CLNC DEL
127.75	119.2 284.7	120.6 257.8	121.9	132.4



FAF to MAP 6.4 NM					
Knots	60	90	120	150	180
Min:Sec	6:24	4:16	3:12	2:34	2:08

CATEGORY	A	B	C	D
S-ILS 13R	291/50 273 (300-1)			
CIRCLING	780-1 759 (800-1)	840-1¼ 819 (900-1¼)	900-2½ 879 (900-2½)	960-3 939 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

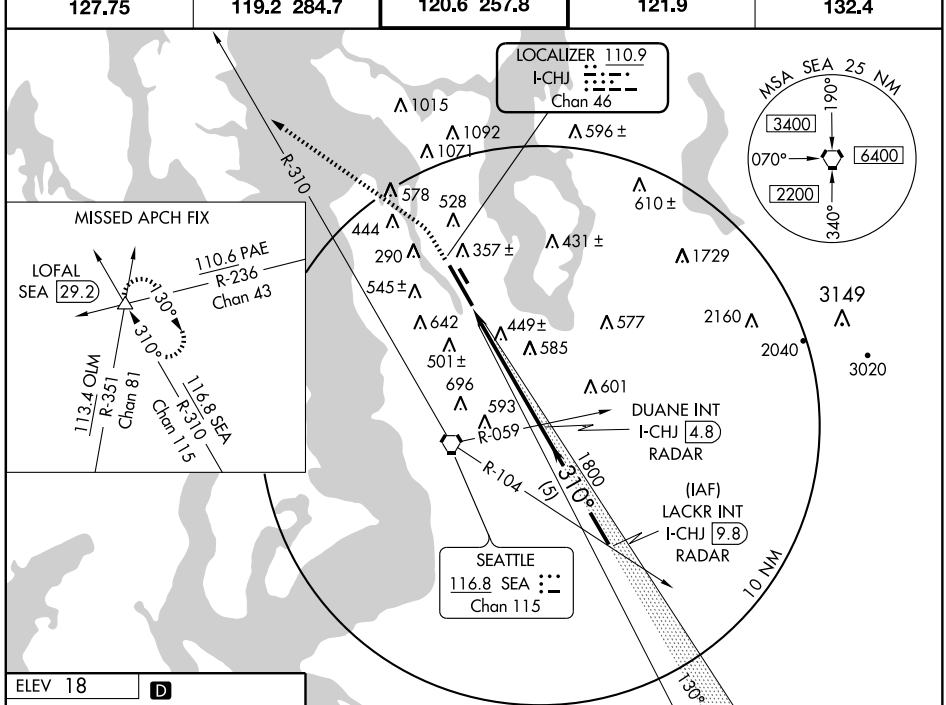
LOC/DME I-CHJ	APP CRS	Rwy Idg	9120
110.9	310°	TDZE	18
Chan 46		Apt Elev	18

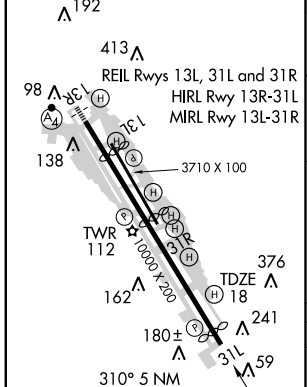
ILS RWY 31L

SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)

MISSED APPROACH: Climb to 700 then climbing left turn to 6000 via heading 285° and SEA R-310 to LOFAL Int/SEA 29.2 DME and hold.

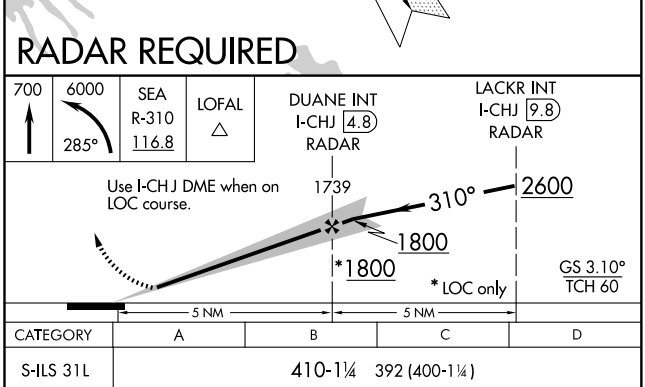
ATIS	SEATTLE APP CON	BOEING TOWER	GND CON	CLNC DEL
127.75	119.2 284.7	120.6 257.8	121.9	132.4





FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

RADAR REQUIRED



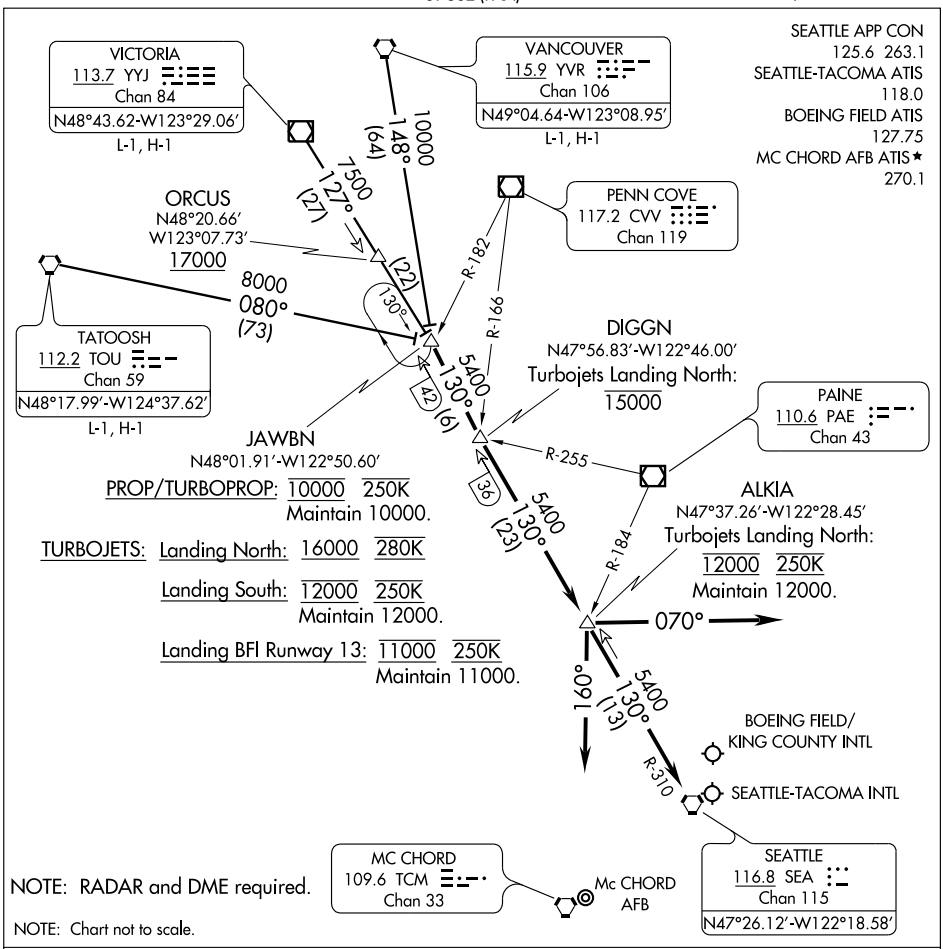
CATEGORY	A	B	C	D
S-ILS 31L	410-1¼ 392 (400-1¼)			
S-LOC 31L	700-1 682 (700-1)		700-2 682 (700-2)	700-2¼ 682 (700-2¼)
CIRCLING	780-1¼ 762 (800-1¼)	840-1¼ 822 (900-1¼)	860-2½ 842 (900-2½)	960-3 942 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

JAWBN ONE ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



PROP/TURBOPROP: 10000 250K
Maintain 10000.

TURBOJETS: Landing North: 16000 280K

Landing South: 12000 250K
Maintain 12000.

Landing BFI Runway 13: 11000 250K
Maintain 11000.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

TATOOSH TRANSITION (TOU.JAWBN1): From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence....

VANCOUVER TRANSITION (YVR.JAWBN1): From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence....

VICTORIA TRANSITION (YYJ.JAWBN1): From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence....

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

LANDING NORTH: Depart ALKIA INT heading 160° for vectors to final approach course.

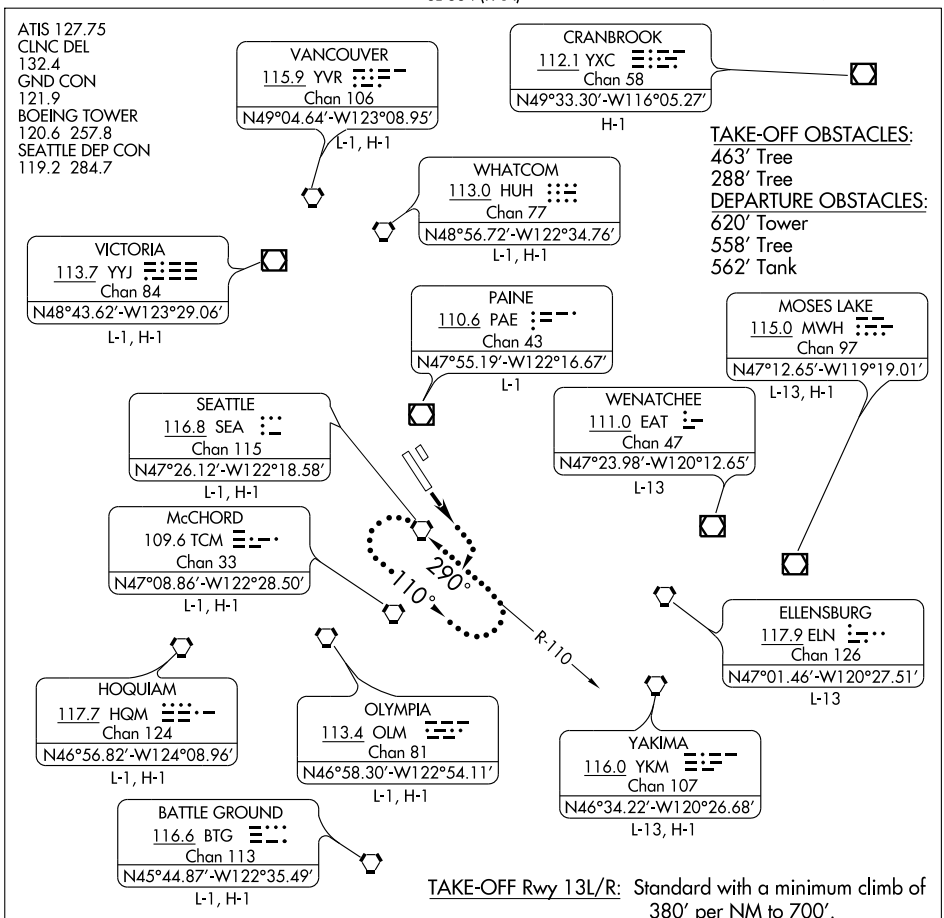
LANDING SOUTH: Depart ALKIA INT heading 070° for vectors to final approach course.

LANDING McCHORD AFB: After ALKIA INT proceed direct SEA VORTAC.

LOST COMMUNICATIONS: After ALKIA INT proceed direct SEA VORTAC.

KENT FOUR DEPARTURE

SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON
SL-384 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 13L/R: Climb runway heading, expect radar vectors to assigned route/fix. Maintain 2000 or ATC assigned altitude, expect clearance to filed altitude within 3 minutes after departure.

LOST COMMUNICATIONS: If no contact with departure control within 3 minutes after departure, climbing right turn direct SEA VORTAC, climb in SEA VORTAC holding pattern (E, left turn 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding enroute.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BFI	APP CRS	Rwy Idg	9120
110.9	130°	TDZE	18
Chan 46		Apt Elev	21

LOC/DME RWY 13R

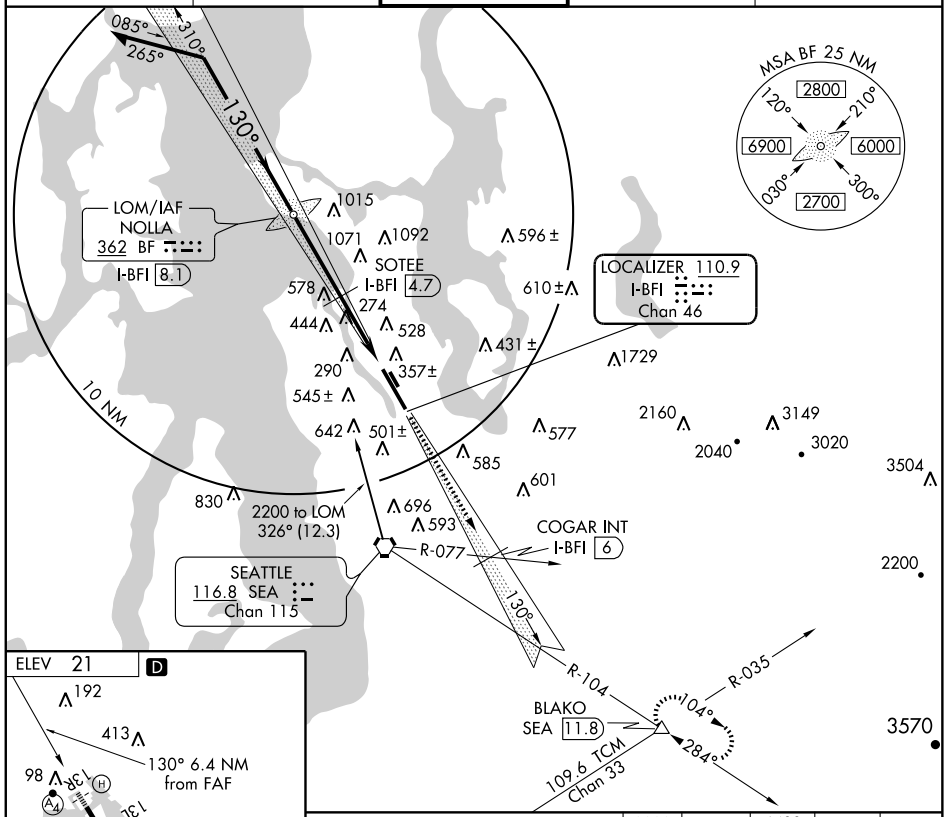
SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)

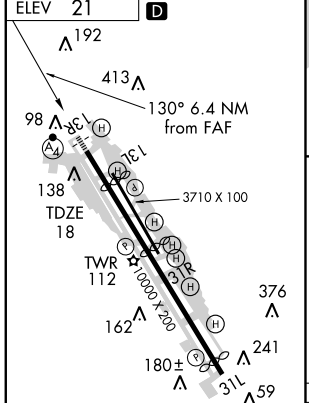
T Inoperative table does not apply. Visibility reduction by helicopters NA. Front course unusable beyond 20 degrees left of course.

MALSF

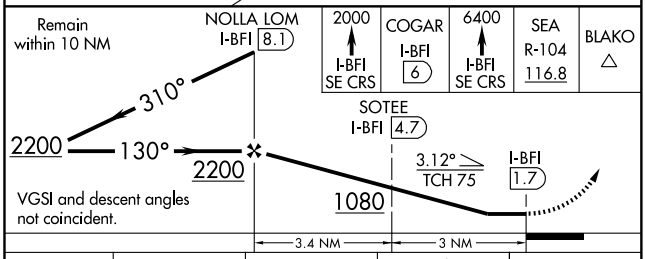
MISSED APPROACH: Climb to 2000 via I-BFI SE course to COGAR/ I-BFI 6 DME/SEA R-077, then continue climb to 6400 via I-BFI SE course and SEA R-104 to BLAKO Int/SEA 11.8 DME and hold, continue climb-in-hold to 6400.

ATIS	SEATTLE APP CON	BOEING TOWER	GND CON	CLNC DEL
127.75	119.2 284.7	120.6 257.8	121.9	132.4





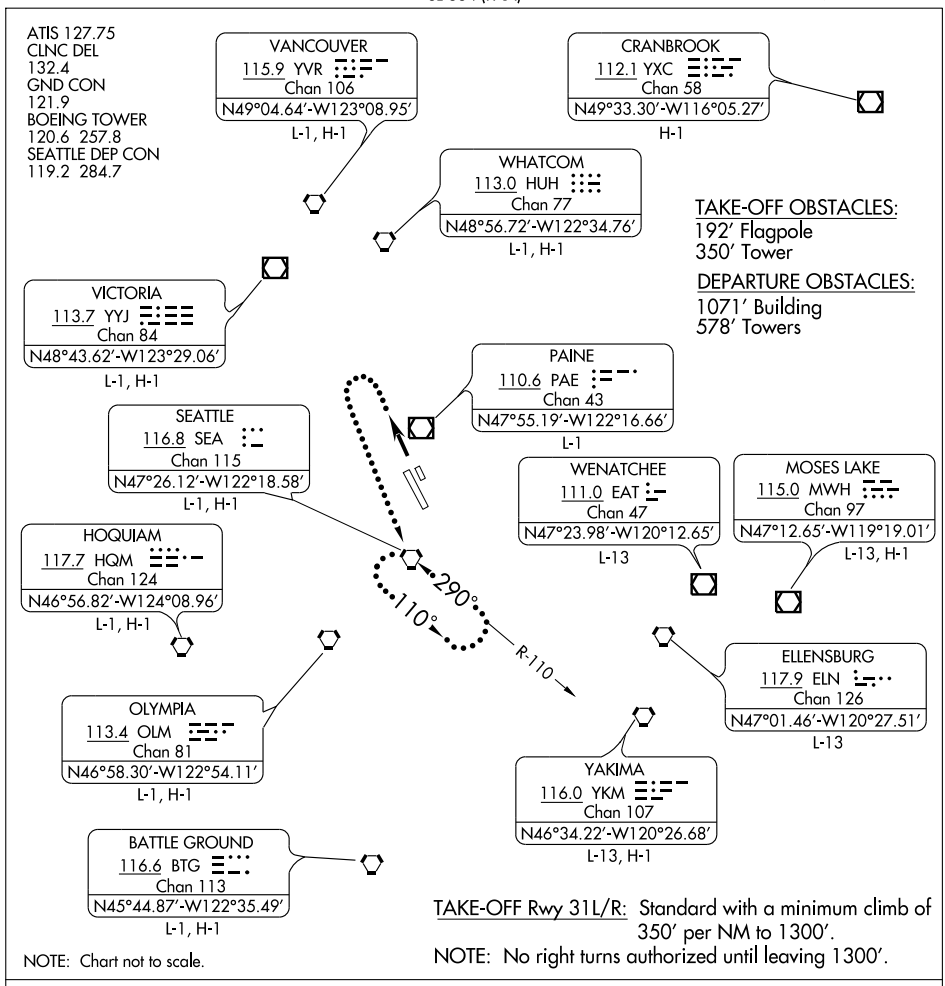
MIRL Rwy 13L-31R
HIRL Rwy 13R-31L
REIL Rwys 13L, 31L and 31R



CATEGORY	A	B	C	D
S-LOC 13R	560/50 542 (600-1)		560-1½ 542 (600-1½)	560-1¾ 542 (600-1¾)
CIRCLING	780-1 759 (800-1)	840-1¼ 819 (900-1¼)	900-2½ 879 (900-2½)	960-3 939 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

NEEDLE SIX DEPARTURE



DEPARTURE ROUTE DESCRIPTION

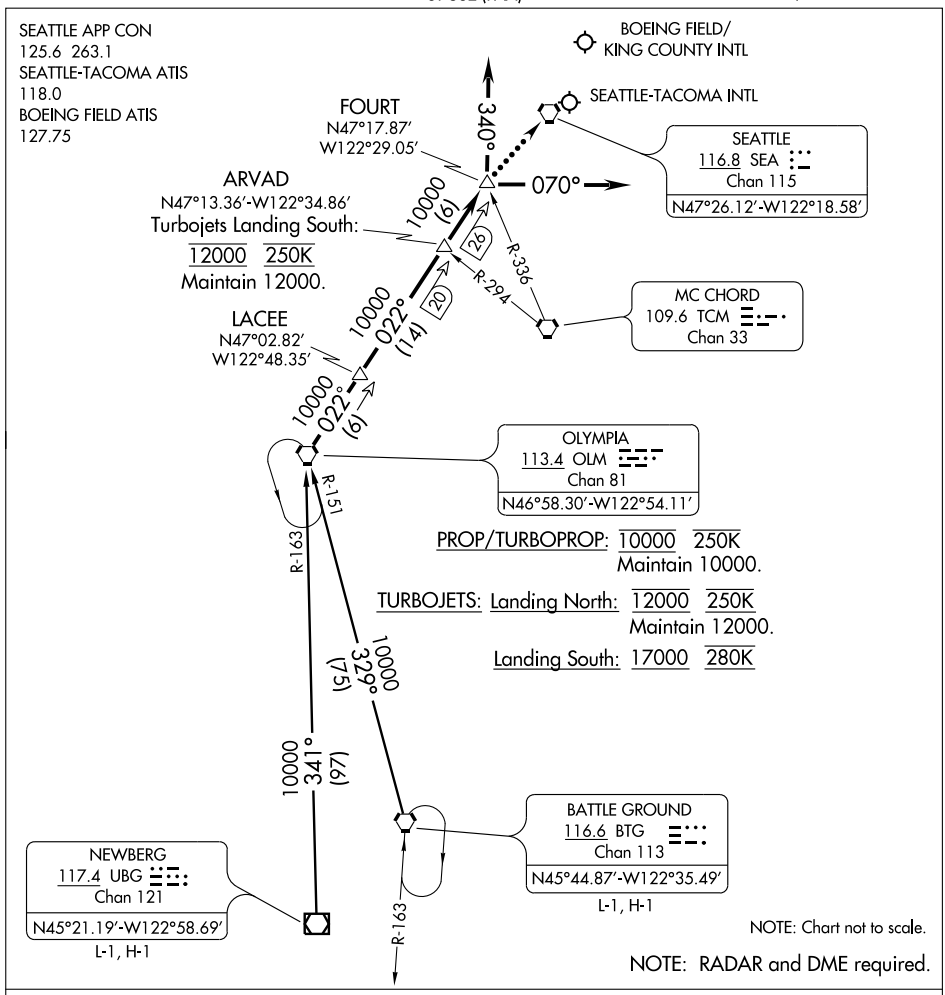
TAKE-OFF RUNWAYS 31L/R: Climb runway heading, expect radar vectors to assigned route/fix. Maintain 2000 or ATC assigned altitude, expect clearance to filed altitude within 3 minutes after departure.

LOST COMMUNICATIONS: If no contact with departure control within 3 minutes after departure, climbing left turn direct SEA VORTAC, climb in SEA VORTAC holding pattern (E, left turn 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding enroute.

OLYMPIA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



BATTLE GROUND TRANSITION (BTG.OLM6): From over BTG VORTAC via BTG R-329 and OLM R-151 to OLM VORTAC. Thence....

NEWBERG TRANSITION (UBG.OLM6): From over UBG VOR/DME via UBG R-341 and OLM R-163 to OLM VORTAC. Thence....

....From over OLM VORTAC via OLM R-022 to LACEE/OLM 6 DME, then via OLM R-022 to ARVAD INT/OLM 20 DME, then via OLM R-022 to FOURT INT/OLM 26 DME, thence...

LANDING NORTH: Depart FOURT INT/OLM 26 DME heading 070° for vectors to final approach course.

LANDING SOUTH: Depart FOURT INT/OLM 26 DME heading 340° for vectors to final approach course.

LOST COMMUNICATIONS: From over FOURT INT/OLM 26 DME, proceed direct SEA VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9120
130°	TDZE	18
	Apt Elev	21

RNAV (GPS) Y RWY 13R

SEATTLE/BOEING FIELD/KING COUNTY INTL (BFI)

Circling to Rwy 13L/31R NA at night.
Inoperative table does not apply.
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

MALSF

MISSED APPROACH: Climb to 6400 direct DUANE and via 117° track to BLAKO and hold, continue climb-in-hold to 6400.

ATIS	SEATTLE APP CON	BOEING TOWER	GND CON	CLNC DEL
127.75	119.2 284.7	120.6 257.8	121.9	132.4

(IAF) LOFAL
2900 127° (13.9)
(IAF) ZUVEN
4000 198° (9.2)
PAINE PAE
2900 179° (9)
(IF) JUGOK
1700 101° (6)
(FAF) FISEN
ZAGRO 3.4 NM to RW13R
130°
RW13R
DUANE
117°
BLAKO
103° 5 NM 283°

Procedure NA for arrivals at PAE via VOR/DME via airway radials 163 CW 236.
Procedure NA for arrivals at LOFAL via V4-495 northwest bound.

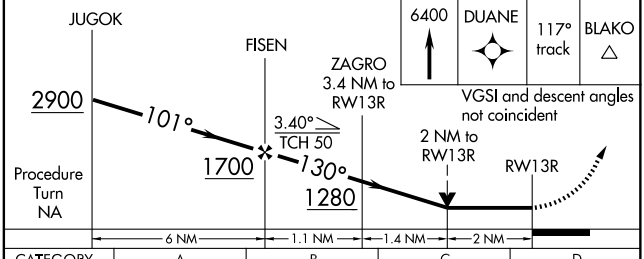
MSA RW13R 25 NM
6200

1015 1092 1071 596± 610± 578 444 528 290 357± 431± 1729 545± 642 501± 577 2160 2040 3149 585 830 696 593 601

MISSED APCH FIX

ELEV 21 D
130° to RW13R
192 413 TDZE 18 98 138 138 131 3710 X 100 TWR 112 10000 X 200 376 162 180± 241 59 31L

MIRL Rwy 13L-31R
HIRL Rwy 13R-31L
REIL Rwy 13L, 31L and 31R



CATEGORY	A	B	C	D
LNAV MDA	720/50	703 (700-1)	720-2 703 (700-2)	720-2¼ 703 (700-2¼)
CIRCLING	780-1 759 (800-1)	840-1¼ 819 (900-1¼)	900-2¾ 879 (900-2¾)	960-3 939 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	9120
130°	TDZE	18
	Apt Elev	21

RNAV (RNP) Z RWY 13R

SEATTLE/ BOEING FIELD/KING COUNTY INTL (BFI)

GPS and RF required. For uncompensated Baro-VNAV systems, procedure NA below -3°C (26°F) or above 48°C (119°F). For inoperative MALSF, increase RNP 0.15 visibility to 1¾, RNP 0.30 to 2¼.

MALSF

MISSED APPROACH: Climb to 2000 via 130° track to DUANE then climb to 6400 via 117° track to BLAKO and hold. Continue climb-in-hold to 6400.

ATIS	SEATTLE APP CON	BOEING TOWER	GND CON	CLNC DEL
127.75	119.2 284.7	120.6 257.8	121.9	132.4

Procedure NA for arrivals at LOFAL via V287 westbound and V4 northbound.

Procedure NA for arrivals at PAE VOR/DME airway radials 163 CW 236.

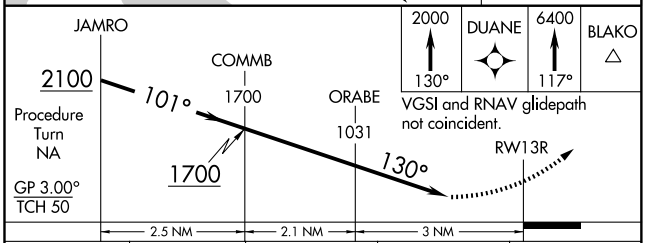
MSA RW13R 25 NM
6200

LOFAL
2900
127°
(13.9)
PAINE
PAE
4000
198°
(9.2)
(IAF)
ZUVEN
3400
196°
(3.7)
FOGUL
(RNP 0.50)
2100
(8.3)
(IAF)
JUGOK
(RNP 0.50)
2100
106° (2.9)
1700
101° (2.5)
(IF)
JAMRO
(RNP 0.50)
(2.1)
(FAF)
COMMB
ORABE
578
444
528
130°
(3)
290
363±
232±
97±
RW13R
545±
501±
642
130°
(6.5)
DUANE
117°
(9.8)
696
593
830
601
585
577
2160
2040
1729
1092
1071
1015
596±
610±
431±
2189±

MISSED APCH FIX
5 NM
103°
283°
BLAKO

ELEV 21 D
130° to RW13R
192
413
98
TDZE
18
138
3710 X 100
TWR
112
10000 X 200
162
180±
376
241
59
31L

MIRL Rwy 13L-31R
HIRL Rwy 13R-31L
REIL Rwys 13L, 31L and 31R



CATEGORY	A	B	C	D
RNP 0.15 DA	523-1½ 505 (600-1½)			
RNP 0.30 DA	637-2 619 (700-2)			

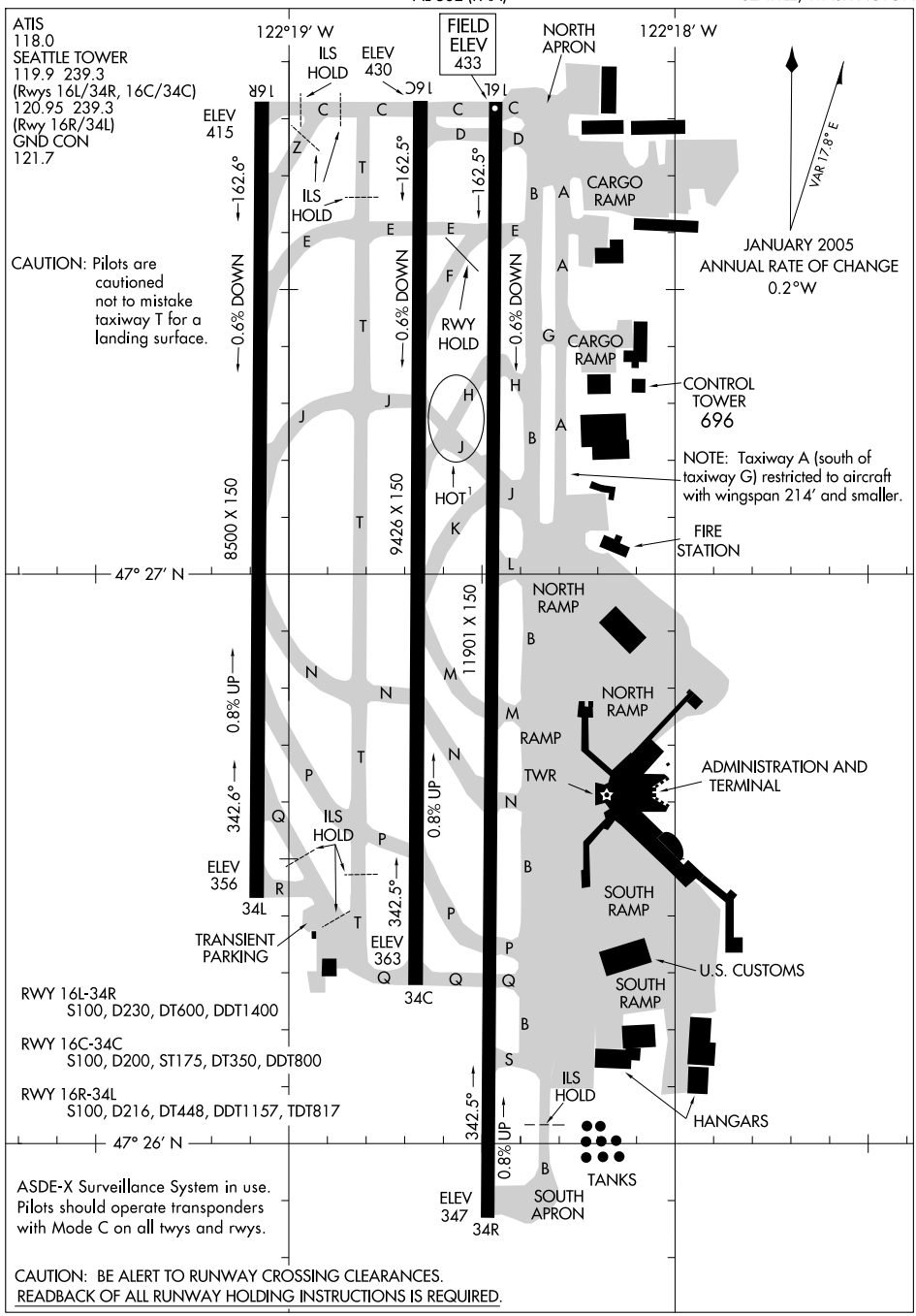
SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

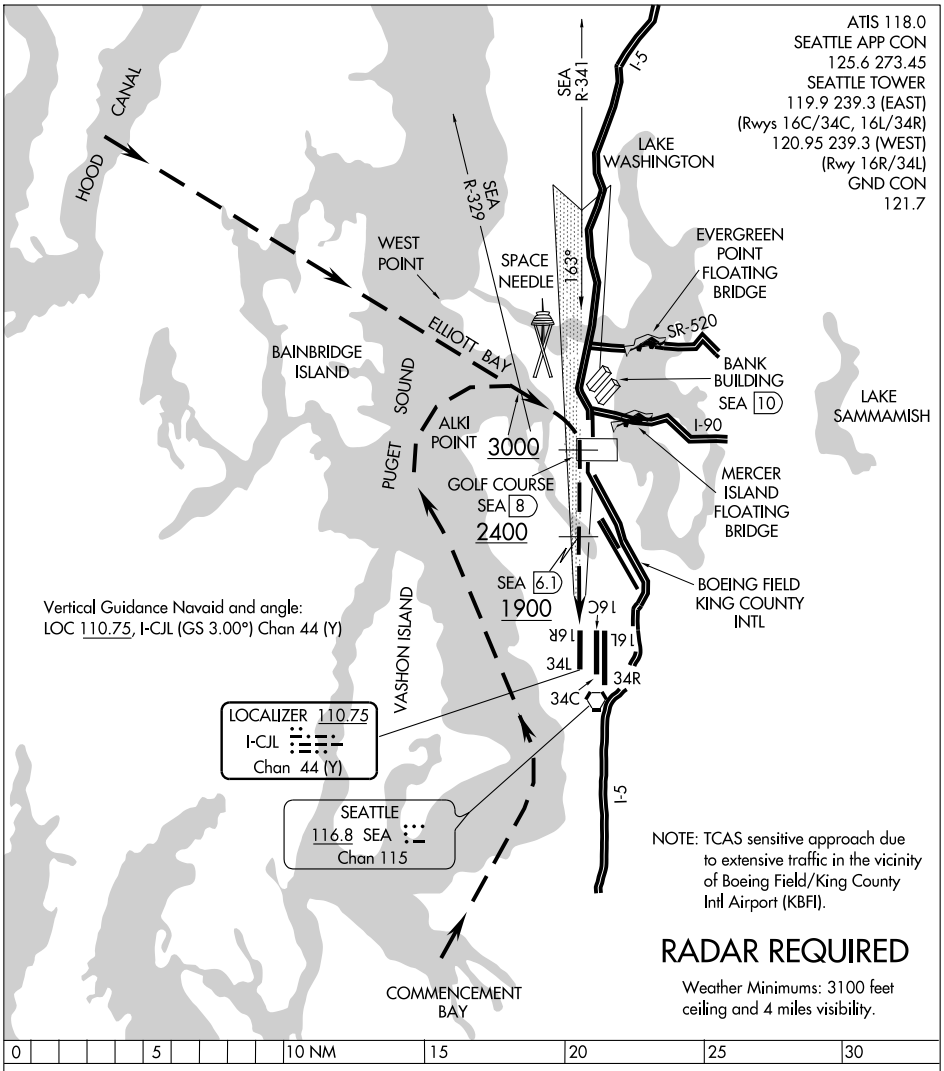


NW-1, 14 JAN 2010 to 11 FEB 2010

ALKI VISUAL RWY 16R

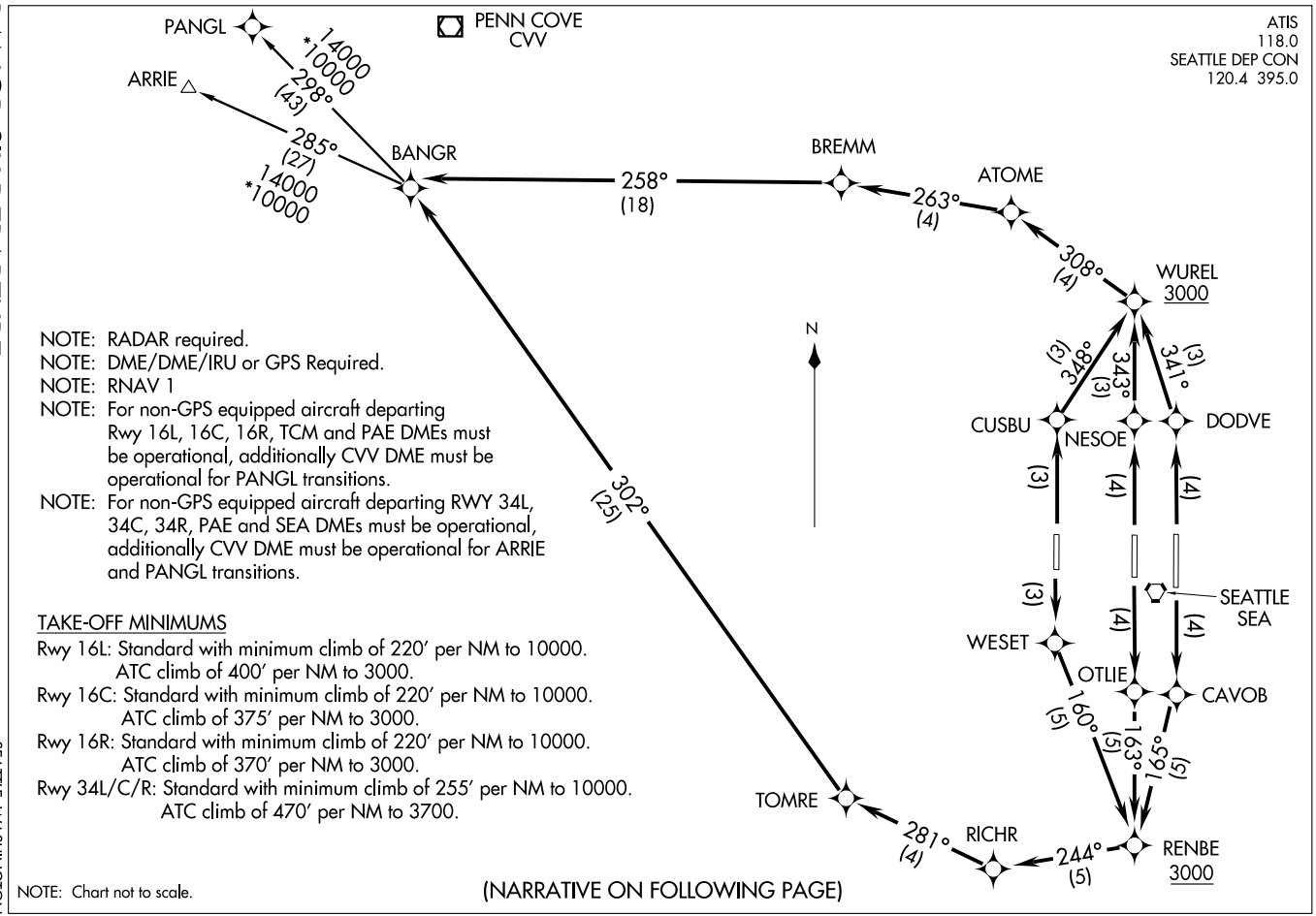
AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



ALKI VISUAL APPROACH RWY 16R

When the ceiling is at least 3100′ and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for an ALKI Visual Runway 16R Approach. When cleared for an ALKI Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the Runway 16R Localizer/SEA R-341 on Runway 16R extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300′ per mile may be made with reference to the altitudes shown at the visual checkpoints or associated DME/fix positions.


PANGL
ARRIE
BANGR
PENN COVE
CVV
ATIS
118.0
SEATTLE DEP CON
120.4 395.0
BANGR SIX DEPARTURE (RNAV)
(BANGR6.BANGR) 09015
SL-582 (FAA)
SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON
14000
*10000
298°
(43)
285°
(27)
14000
*10000
258°
(18)
BREMM
263°
(4)
ATOME
308°
(4)
WUREL
3000
N
348°
(3)
343°
(3)
341°
(3)
CUSBU
NESOE
DODVE
(3)
(4)
(4)
(3)
(4)
(4)
SEATTLE
SEA
WESET
OTLIE
CAVOB
160°
(5)
163°
(5)
159°
(5)
302°
(25)
TOMRE
281°
(4)
RICHR
244°
(5)
RENBE
3000
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS Required.
NOTE: RNAV 1
NOTE: For non-GPS equipped aircraft departing Rwy 16L, 16C, 16R, TCM and PAE DMEs must be operational, additionally CVV DME must be operational for PANGL transitions.
NOTE: For non-GPS equipped aircraft departing RWY 34L, 34C, 34R, PAE and SEA DMEs must be operational, additionally CVV DME must be operational for ARRIE and PANGL transitions.
TAKE-OFF MINIMUMS
Rwy 16L: Standard with minimum climb of 220' per NM to 10000.
ATC climb of 400' per NM to 3000.
Rwy 16C: Standard with minimum climb of 220' per NM to 10000.
ATC climb of 375' per NM to 3000.
Rwy 16R: Standard with minimum climb of 220' per NM to 10000.
ATC climb of 370' per NM to 3000.
Rwy 34L/C/R: Standard with minimum climb of 255' per NM to 10000.
ATC climb of 470' per NM to 3700.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

BANGR SIX DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct CAVOB, then via 165° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .
TAKE-OFF RUNWAY 16C: Climb direct OTLIE, then via 163° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .
TAKE-OFF RUNWAY 16R: Climb direct WESET, then via 160° track to cross RENBE at or above 3000, then via depicted route to BANGR, thence. . . .
TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .
TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .
TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to BANGR, thence. . . .

. . . . via (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ARRIE TRANSITION (BANGR6.ARRIE)
PANGL TRANSITION (BANGR6.PANGL)

TAKE-OFF OBSTACLE NOTES

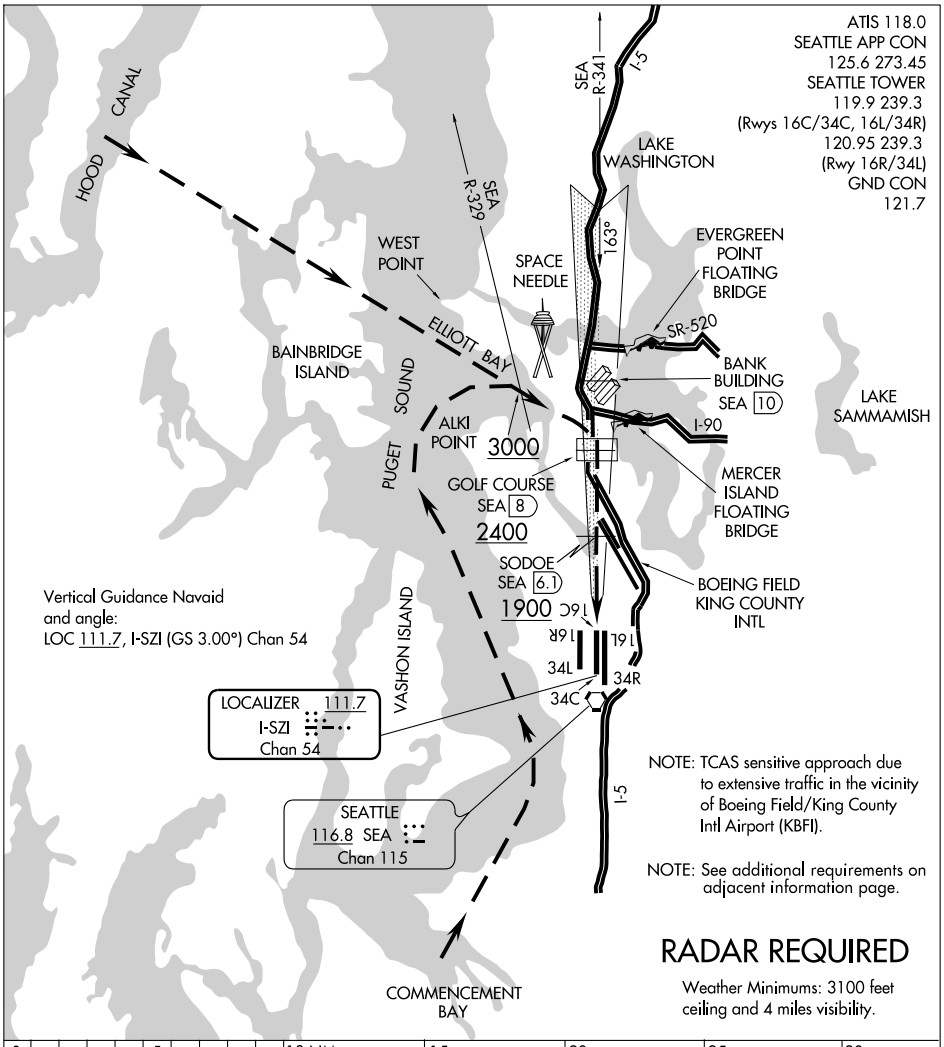
Rwy 16L: Trees beginning 2908′ from DER, 1064′ right of centerline, up to 100′ AGL/476′ MSL.
Rwy 16C: Trees begining 4477′ from DER, 484′ right of centerline, up to 100′ AGL/507′ MSL.
Rwy 16R: Trees, antenna on building and light pole beginning 488′ from DER, 436′ left of centerline, up to 100′ AGL/507′ MSL. Trees beginning 1137′ from DER, 587′ right of centerline, up to 100′ AGL/468′ MSL.
Rwy 34L: Fence 189′ from DER, 401′ right of centerline, up to 12′ AGL/420′ MSL. Trees beginning 4010′ from DER, 857′ left of centerline, up to 100′ AGL/522′ MSL.

NW-1, 14 JAN 2010 to 11 FEB 2010

BAY VISUAL RWY 16C

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



BAY VISUAL APPROACH RWY 16C

When the ceiling is at least 3100′ and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for a Bay Visual Runway 16C Approach. When cleared for a Bay Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the Runway 16C Localizer/SEA R-341 on Runway 16C extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300′ per mile may be made with reference to the altitudes shown at the visual checkpoints or associated DME/fix positions.

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

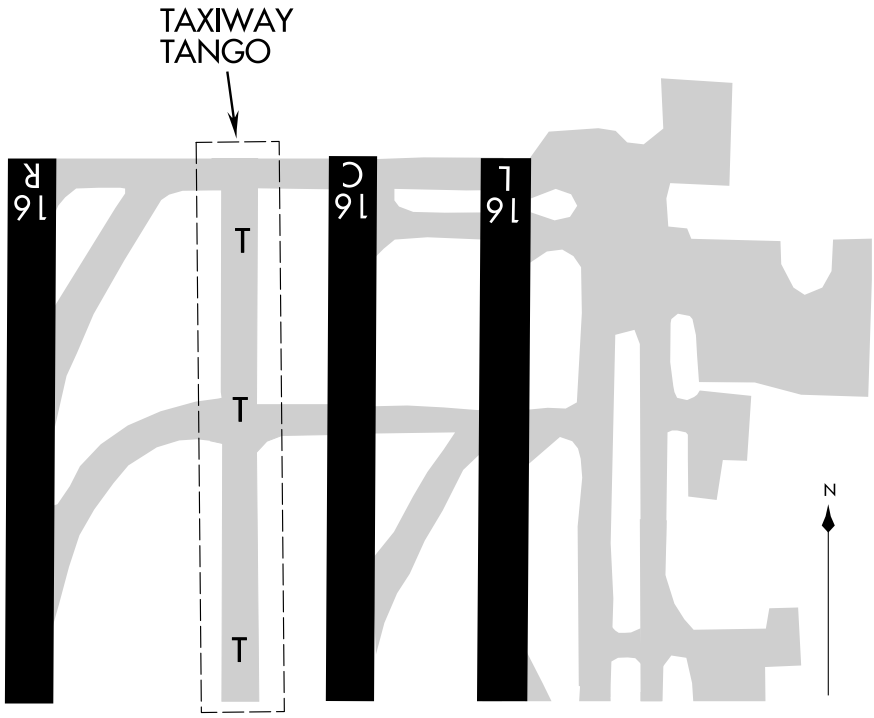
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

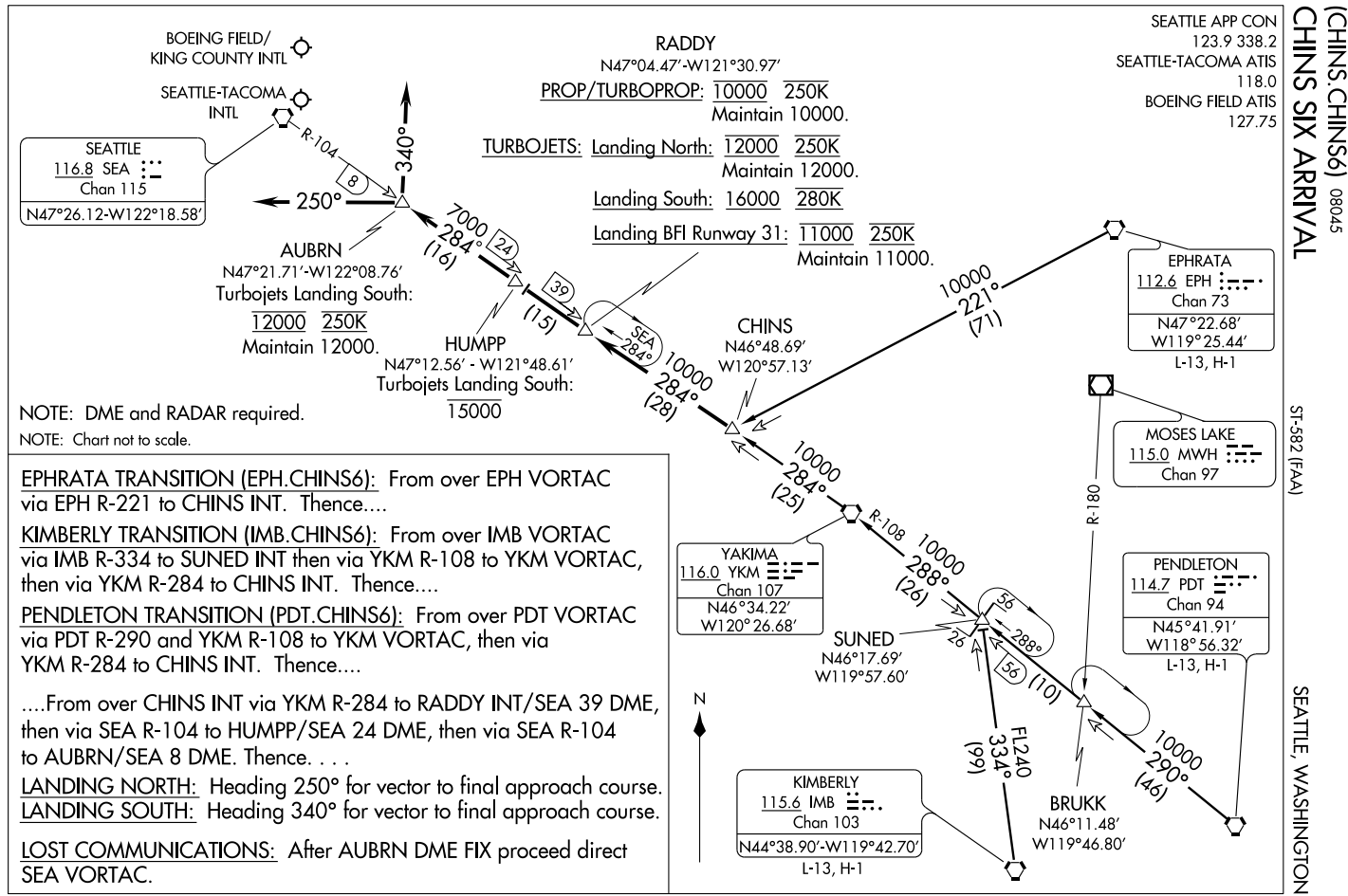
TRANSITION TO VISUAL:

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

RECOMMENDTION:

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.





EPHRATA TRANSITION (EPH.CHINS6): From over EPH VORTAC via EPH R-221 to CHINS INT. Thence....

KIMBERLY TRANSITION (IMB.CHINS6): From over IMB VORTAC via IMB R-334 to SUNED INT then via YKM R-108 to YKM VORTAC, then via YKM R-284 to CHINS INT. Thence....

PENDLETON TRANSITION (PDT.CHINS6): From over PDT VORTAC via PDT R-290 and YKM R-108 to YKM VORTAC, then via YKM R-284 to CHINS INT. Thence....

....From over CHINS INT via YKM R-284 to RADDY INT/SEA 39 DME, then via SEA R-104 to HUMPP/SEA 24 DME, then via SEA R-104 to AUBRN/SEA 8 DME. Thence. . . .

LANDING NORTH: Heading 250° for vector to final approach course.

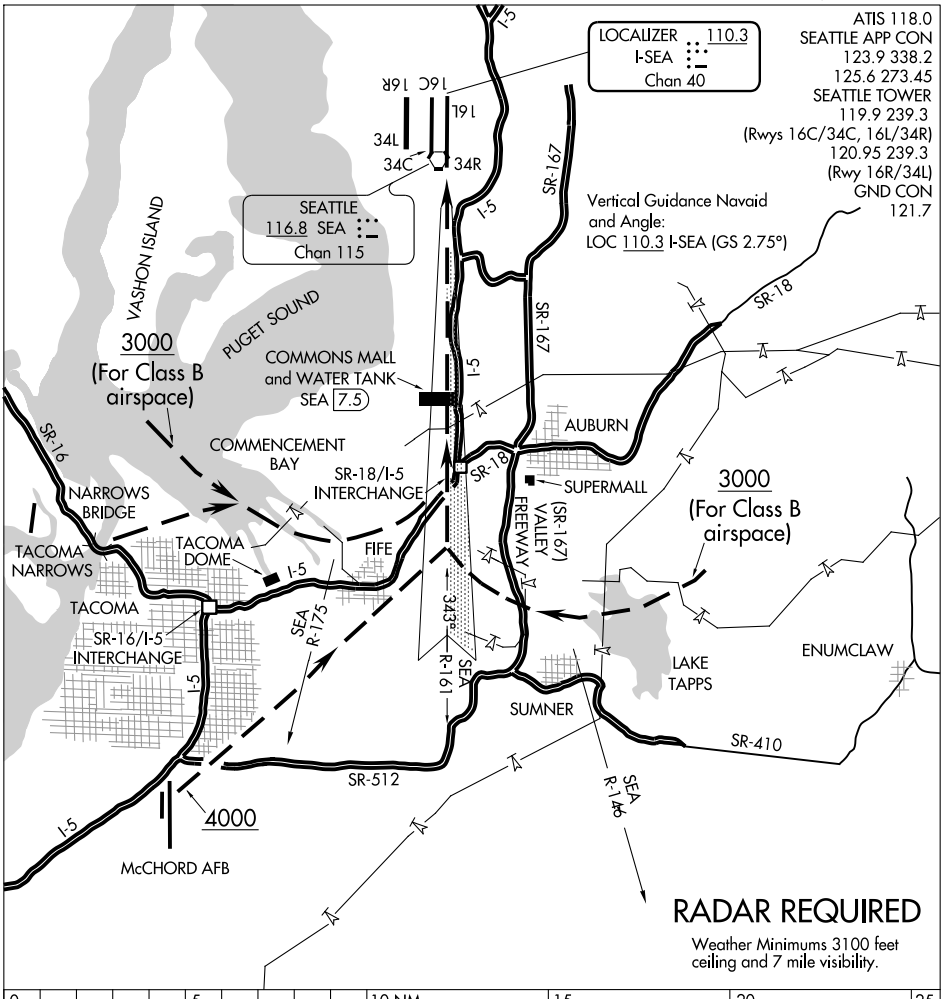
LANDING SOUTH: Heading 340° for vector to final approach course.

LOST COMMUNICATIONS: After AUBRN DME FIX proceed direct SEA VORTAC.

COMMONS VISUAL RWY 34R

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



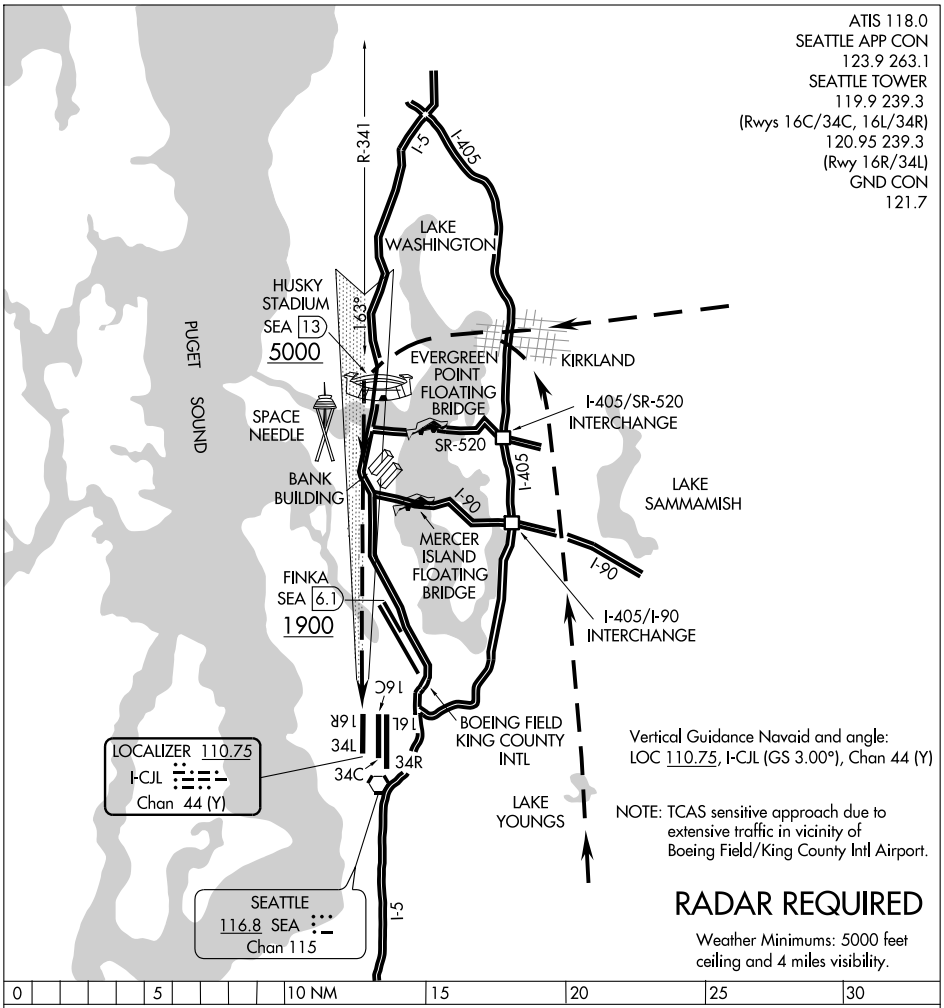
COMMONS VISUAL APPROACH RWY 34R

When the ceiling is at least 3100′ and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord AFB or Lake Tapps for a Commons Visual Runway 34R Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34R. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to the runway.

DAWG VISUAL RWY 16R

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



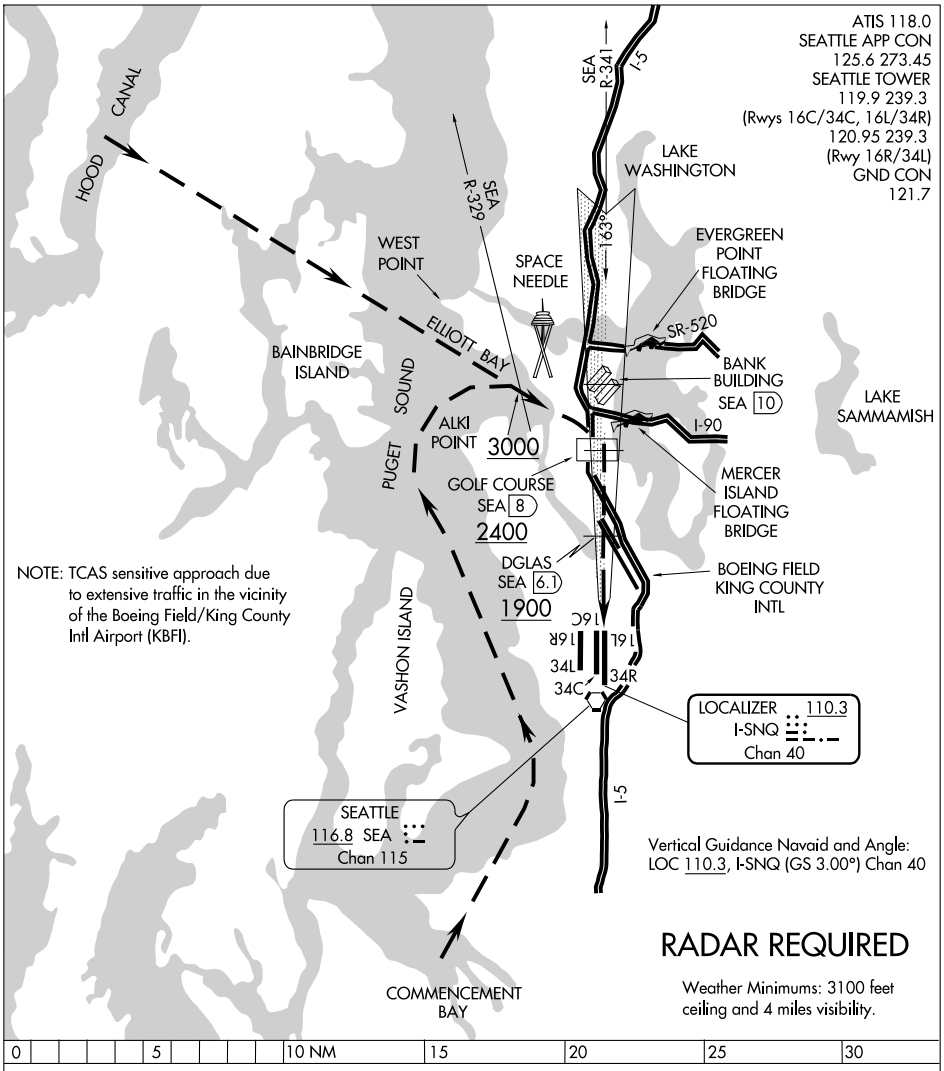
DAWG VISUAL APPROACH RWY 16R

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Dawg Visual Runway 16R Approach. When cleared for a Dawg Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16R localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

ELLIOTT VISUAL RWY 16L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



NOTE: TCAS sensitive approach due to extensive traffic in the vicinity of the Boeing Field/King County Intl Airport (KBFI).

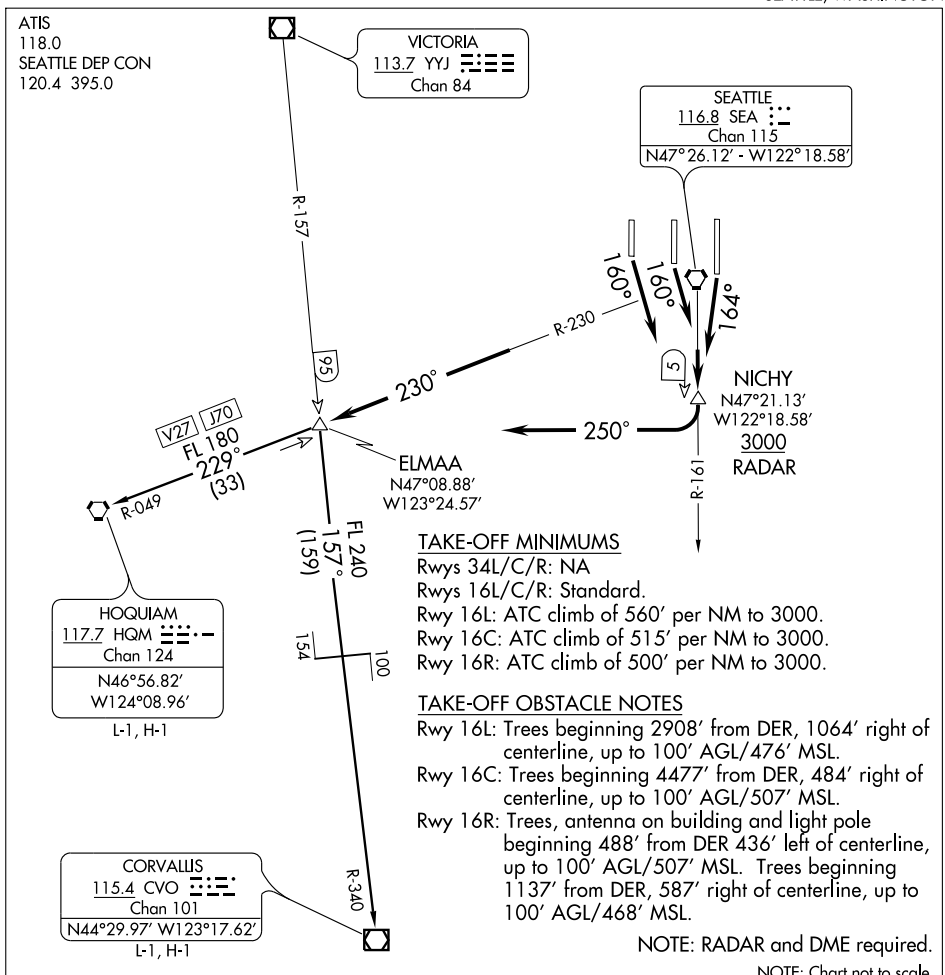
ELLIOTT VISUAL APPROACH RWY 16L

When the ceiling is at least 3100′ and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for an Elliott Visual Runway 16L Approach. When cleared for an Elliott Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the 16L Localizer/SEA R-341 on Runway 16L extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300′ per mile may be made with reference to the altitude shown at the visual checkpoints or associated DME/fix positions.

ELMAA EIGHT DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



TAKE-OFF MINIMUMS

Rwys 34L/C/R: NA
Rwys 16L/C/R: Standard.
Rwy 16L: ATC climb of 560′ per NM to 3000.
Rwy 16C: ATC climb of 515′ per NM to 3000.
Rwy 16R: ATC climb of 500′ per NM to 3000.

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908′ from DER, 1064′ right of centerline, up to 100′ AGL/476′ MSL.
Rwy 16C: Trees beginning 4477′ from DER, 484′ right of centerline, up to 100′ AGL/507′ MSL.
Rwy 16R: Trees, antenna on building and light pole beginning 488′ from DER 436′ left of centerline, up to 100′ AGL/507′ MSL. Trees beginning 1137′ from DER, 587′ right of centerline, up to 100′ AGL/468′ MSL.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161, thence. . . .
TAKE-OFF RUNWAYS 16C/R: Climb heading 160° and SEA R-161, thence. . . .

. . . .to cross NICHY/5 DME/RADAR at or above 3000, then right turn heading 250° to intercept SEA R-230 to ELMAA INT, then via (transition/assigned route), expect filed altitude/flight level 15 NM from SEA.

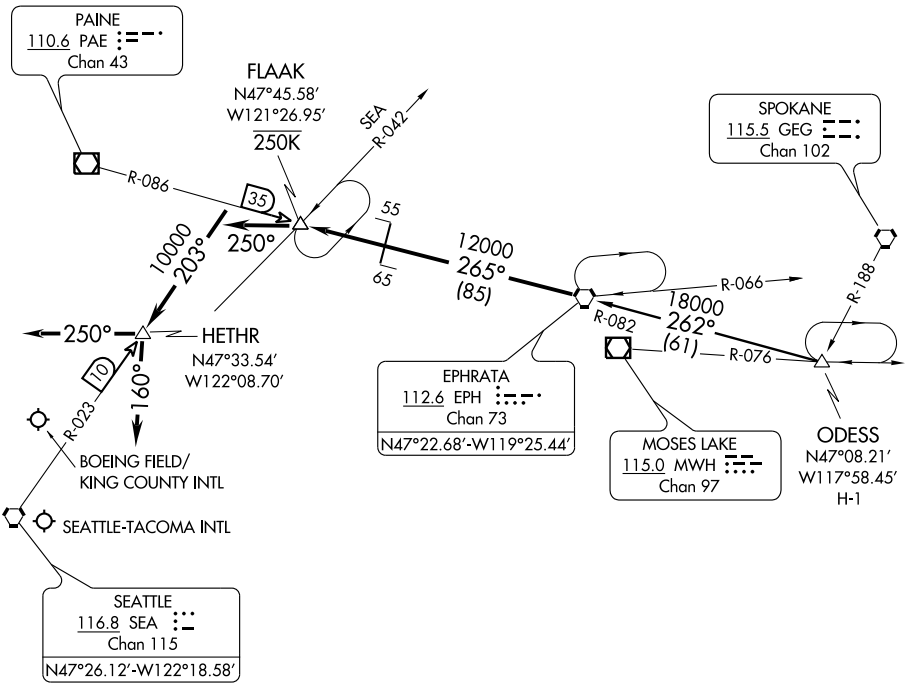
CORVALLIS TRANSITION (ELMAA8.CVO): From over ELMAA INT via YYJ R-157 and CVO R-340 to CVO VOR/DME.

HOQUIAM TRANSITION (ELMAA8.HQM): From over ELMAA INT via HQM R-049 to HQM VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

EPHRATA SIX ARRIVAL

SEATTLE APP CON
123.9 338.2
SEATTLE-TACOMA ATIS
118.0
BOEING FIELD ATIS
127.75



NOTE: DME and RADAR required.

ODESS TRANSITION (ODESS.EPH6): From over ODESS INT via EPH R-082 to EPH VORTAC. Thence....

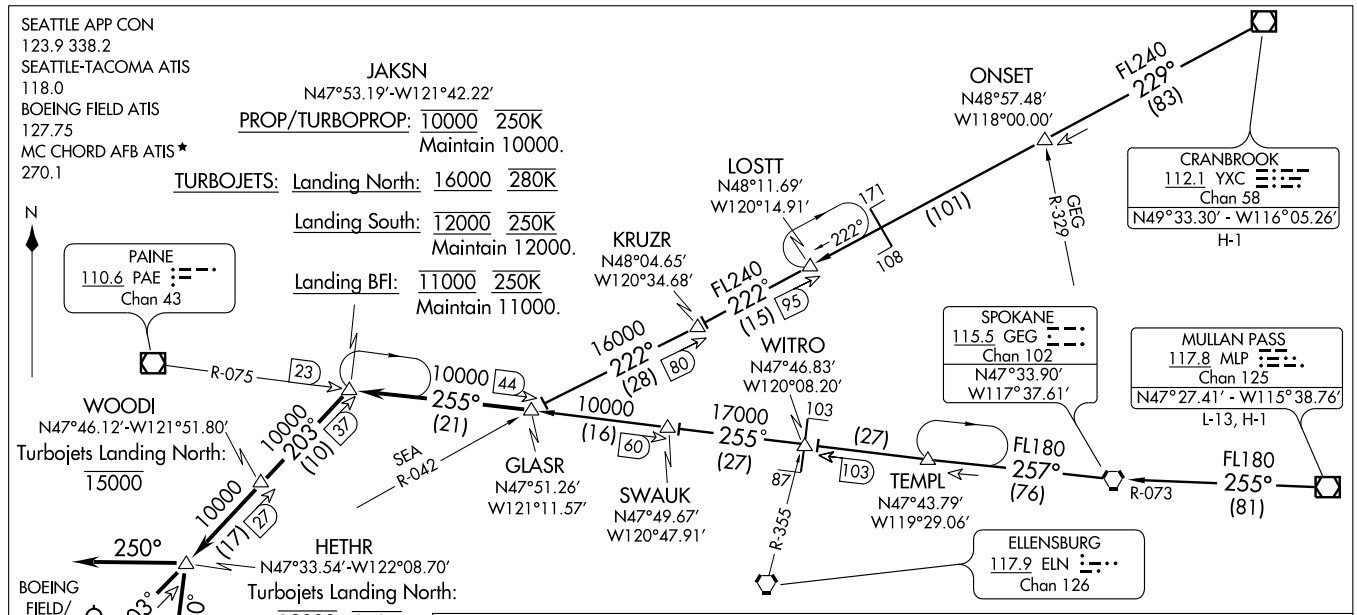
....From over EPH VORTAC via EPH R-265 and PAE R-086 to FLAAK INT. Then via heading 250° to intercept the SEA R-023, then via SEA R-023 to HETHR INT, thence....

LANDING NORTH: Heading 160° for vector to final approach course;
LANDING SOUTH: Heading 250° for vector to final approach course.

LOST COMMUNICATIONS: From over HETHR DME proceed direct SEA VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

GLASR SEVEN ARRIVAL



NOTE: Chart not to scale.

NOTE: DME and RADAR required.

CRANBROOK TRANSITION (YXC.GLASR7): From over YXC VOR/DME via YXC R-229 and SEA R-042 to GLASR INT. Thence....

MULLAN PASS TRANSITION (MLP.GLASR7): From over MLP VOR/DME via MLP R-255 and GEG R-073 to GEG VORTAC, then via GEG R-257 and PAE R-075 to GLASR INT. Thence....

....from over GLASR/PAE 44 DME via PAE R-075 to JAKSN INT/PAE 23 DME, then via the SEA R-023 to WOODI/SEA 27 DME, then via SEA R-023 to HETHR/SEA 10 DME, Thence....

LANDING NORTH: Heading 160° for vectors to final approach course.

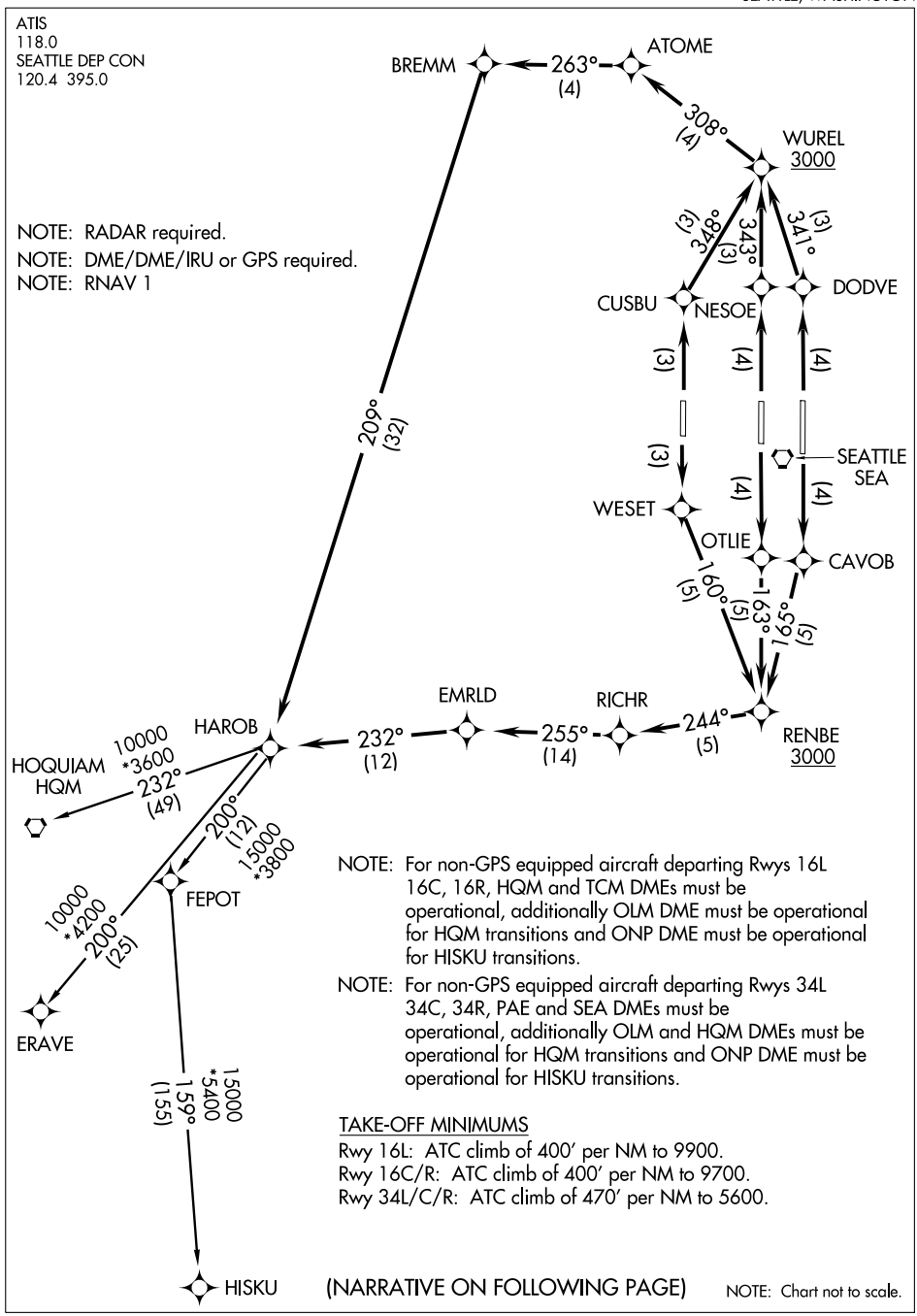
LANDING SOUTH: Heading 250° for vectors to final approach course.

LANDING McCHORD AFB: From over HETHR DME FIX, proceed direct SEA VORTAC.

LOST COMMUNICATIONS: From over HETHR DME FIX, proceed direct SEA VORTAC.

HAROB THREE DEPARTURE (RNAV)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



NOTE: For non-GPS equipped aircraft departing Rwys 16L 16C, 16R, HQM and TCM DMEs must be operational, additionally OLM DME must be operational for HQM transitions and ONP DME must be operational for HISKU transitions.

NOTE: For non-GPS equipped aircraft departing Rwys 34L 34C, 34R, PAE and SEA DMEs must be operational, additionally OLM and HQM DMEs must be operational for HQM transitions and ONP DME must be operational for HISKU transitions.

TAKE-OFF MINIMUMS

Rwy 16L: ATC climb of 400′ per NM to 9900.
Rwy 16C/R: ATC climb of 400′ per NM to 9700.
Rwy 34L/C/R: ATC climb of 470′ per NM to 5600.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NW-1, 14 JAN 2010 to 11 FEB 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct CAVOB, then via 165° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 16C: Climb direct OTLIE, then via 163° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 16R: Climb direct WESET, then via 160° track to cross RENBE at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to HAROB, thence. . . .

. . . . via (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ERAVE TRANSITION (HAROB3.ERAVE)

FEPOT TRANSITION (HAROB3.FEPOT)

HISKU TRANSITION (HAROB3.HISKU)

HOQUIAM TRANSITION (HAROB3.HQM)

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908′ from DER, 1064′ right of centerline, up to 100′ AGL/476′ MSL.

Rwy 16C: Trees beginning 4477′ from DER, 484′ right of centerline, up to 100′ AGL/507′ MSL.

Rwy 16R: Trees, antenna on building and light pole beginning 488′ from DER, 436′ left of centerline, up to 100′ AGL/507′ MSL. Trees beginning 1137′ from DER, 587′ right of centerline, up to 100′ AGL/468′ MSL.

Rwy 34L: Fence 189′ from DER, 401′ right of centerline, up to 12′ AGL/420′ MSL. Trees beginning 4010′ from DER, 857′ left of centerline, up to 100′ AGL/522′ MSL.

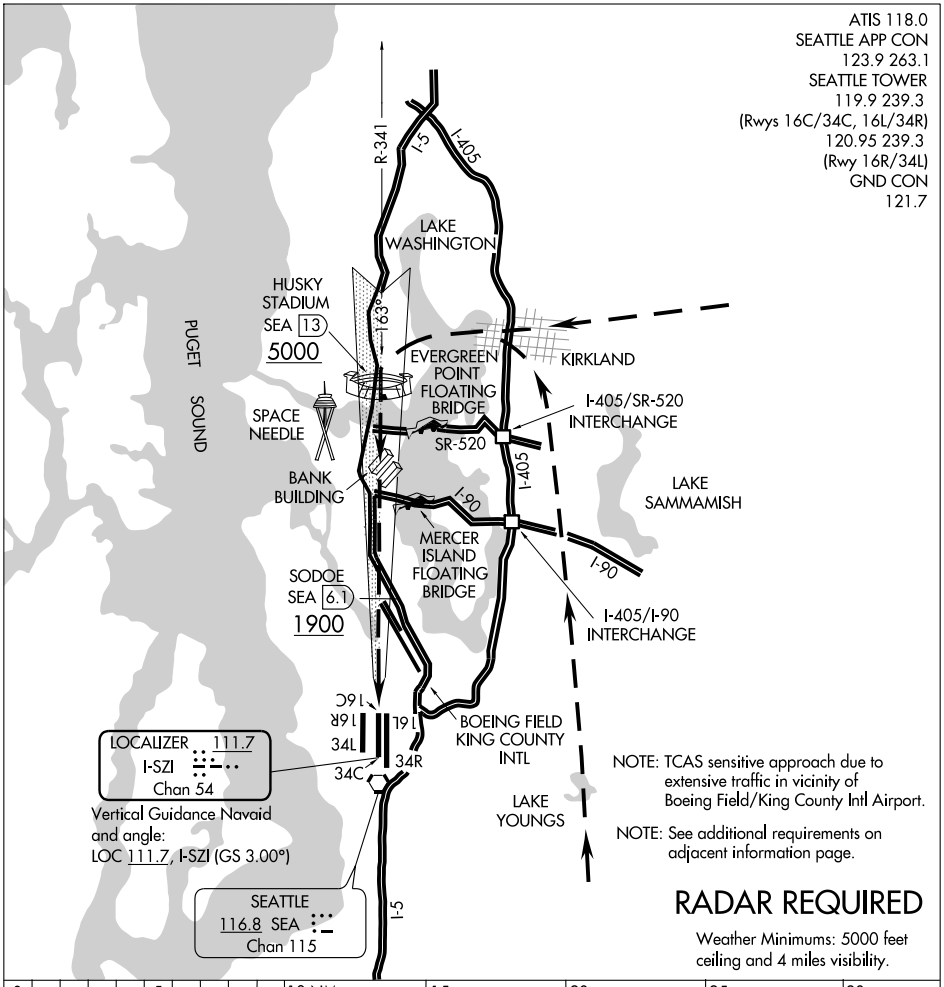
NW-1, 14 JAN 2010 to 11 FEB 2010

HUSKY VISUAL RWY 16C

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

ATIS 118.0
SEATTLE APP CON
123.9 263.1
SEATTLE TOWER
119.9 239.3
(Rwys 16C/34C, 16L/34R)
120.95 239.3
(Rwy 16R/34L)
GND CON
121.7



HUSKY VISUAL APPROACH RWY 16C

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Husky Visual Runway 16C Approach. When cleared for a Husky Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16C localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

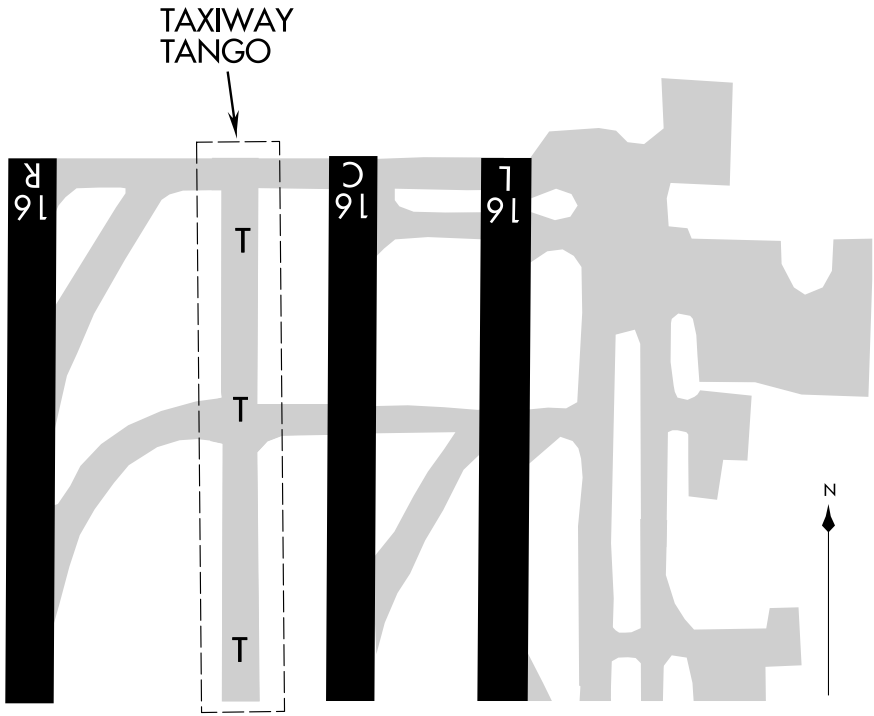
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

TRANSITION TO VISUAL:

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

RECOMMENDTION:

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.



SEATTLE, WASHINGTON AL-582 (FAA)

ILS or LOC RWY 16C

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SZI	APP CRS	Rwy 16C Idg	9426	Rwy 16L Idg	11901
111.7	163°	TDZE	430	TDZE	433
Chan 54		Apt Elev	433	Apt Elev	433

For inoperative ALSF-2, increase S-LOC 16C Cat D visibility to RVR 5000. Inoperative table does not apply to SIDESTEP 16L. DME or RADAR required. See additional requirements on adjacent information page.

ALSF-2 Rwy 16C/L (A)

MISSED APPROACH: Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF PAINE 110.6 PAE Chan 43

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

DME or RADAR REQUIRED

*6000 167° (10.9)

343° R-167 (IF) WEMAT I-SZI 18.2 PAE 10.9 RADAR

163° *5000 (2.9) ERYKA I-SZI 15.3 RADAR

*4000 (2.9) MGNUM I-SZI 12.4 RADAR

*3200 (2.4) ANVIL I-SZI 10 RADAR

1900 163° (3.9) SODOE I-SZI 6.1 RADAR

MSA SEA 25 NM: 180°, 3400, 070°, 6400, 2200, 340°

10 NM

ALTERNATE MISSED APCH FIX: 074°, 254°, R-074, MC CHORD TCM 109.6 Chan 33

MISSED APCH FIX: MILLT INT SEA 11 RADAR; 116.8 SEA Chan 115; 161°, 341°, R-161, R-025, 109.6 TCM Chan 33

LOCALIZER 111.7 I-SZI Chan 54

SEATTLE 116.8 SEA Chan 115

Boeing Field/ King County Intl

1729 2160 3149 2040 3020 529± IM

TEBNE SEA 2.4 RADAR 573 R-161

*When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

160° SEA R-161 116.8

TEBNE SEA 2.4 RADAR 2000

5000 SEA R-161

MILLT INT SEA 11 RADAR

Procedure Turn NA

WEMAT I-SZI 18.2 RADAR

ERYKA I-SZI 15.3 RADAR

MGNUM I-SZI 12.4 RADAR

ANVIL I-SZI 10 RADAR

SODOE I-SZI 6.1 RADAR

VGSI and ILS glidepath not coincident.

I-SZI 2.5

I-SZI 1.7

*6000 163° *5000 *4000 *3200 1900 IM

GS 3.00° TCH 57

2.9 NM 2.9 NM 2.4 NM 3.9 NM 3.6 NM 0.7 0.1

ELEV 433

TDZE 430 515 ± 163° 4.4 NM from FAF

16R 16C 16L

TDZE 433 TWR 696 606

0.6% DOWN 0.6% DOWN 0.6% DOWN

0.8% UP 0.8% UP 0.8% UP

8500 X 150 9426 X 150 11901 X 150

517 593

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
S-ILS 16C	630/18 200 (200-½)			
S-LOC 16C	760/24 330 (400-½)			760/40 330 (400-¾)
SIDESTEP 16L	760/50 327 (400-1)		760-1½ 327 (400-1½)	760-2 327 (400-2)
CIRCLING 16C	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

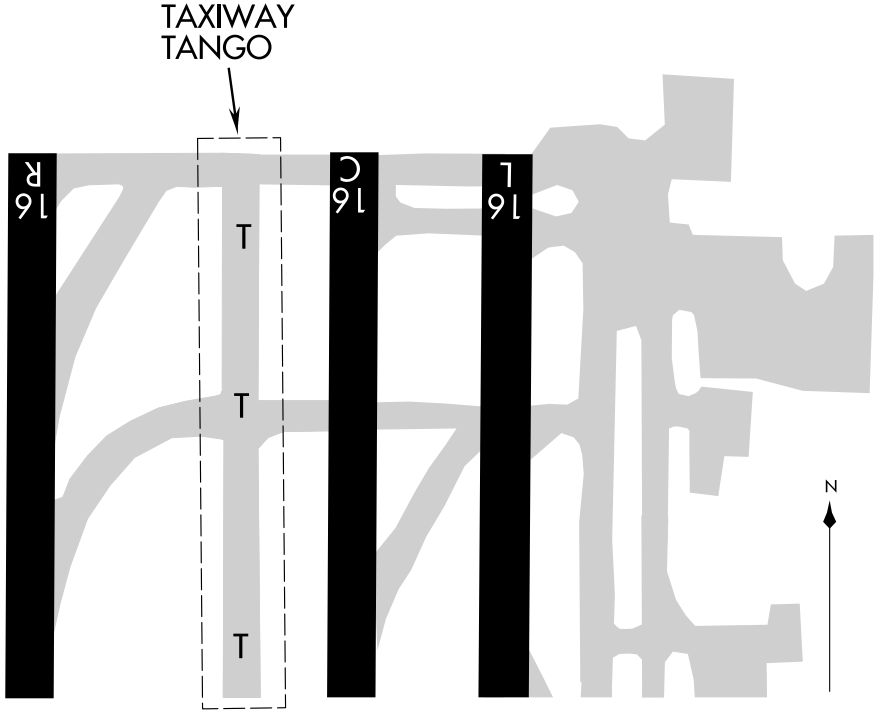
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

TRANSITION TO VISUAL:

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

RECOMMENDTION:

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



LOC/DME I-SNQ	APP CRS	Rwy Idg 11901
110.3	163°	TDZE 433
Chan 40		Apt Elev 433

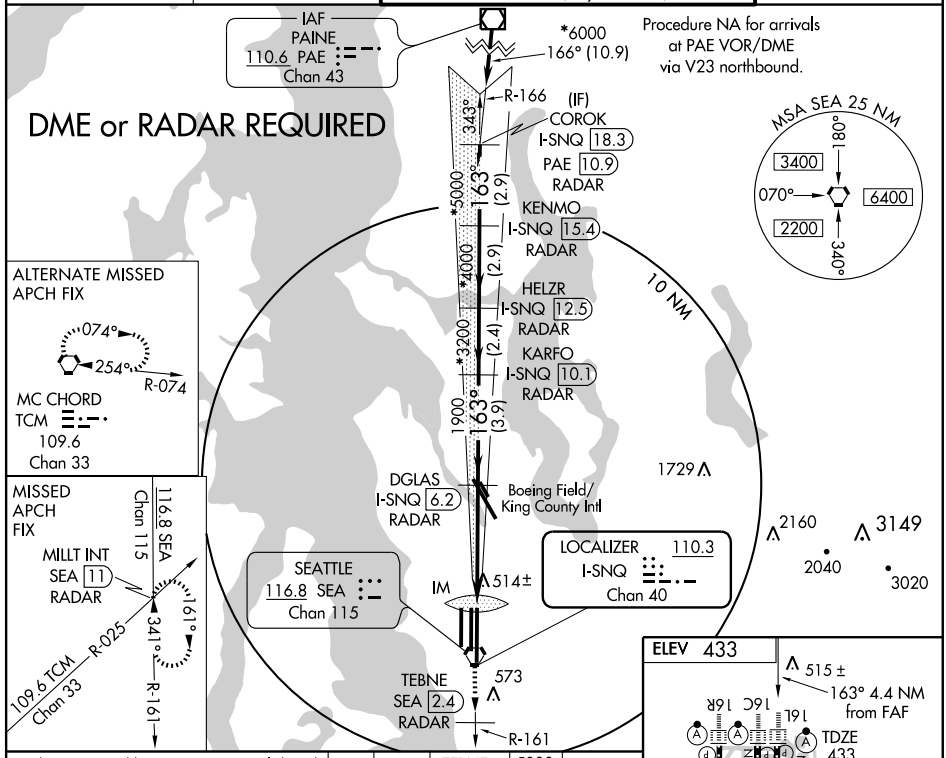
ILS or LOC RWY 16L
SEATTLE-TACOMA INTL (SEA)

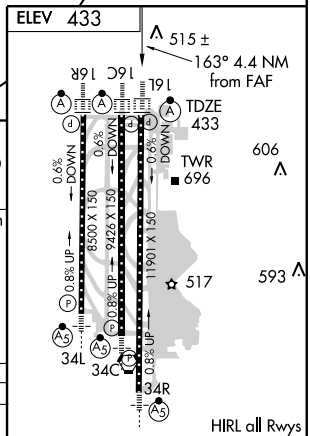
DME or RADAR required.
For inoperative ALSF-2, increase S-ILS 16L Cat. A visibility to RVR 5000.

ALSF-2

MISSED APPROACH: Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

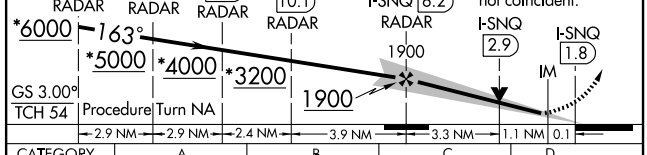




* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

165°	SEA R-161 116.8	TEBNE SEA 2.4 RADAR 2000	5000 SEA R-161	MILLT INT SEA 11 RADAR

COROK I-SNQ 18.3 RADAR
KENMO I-SNQ 15.4 RADAR
HELZR I-SNQ 12.5 RADAR
KARFO I-SNQ 10.1 RADAR
DGLAS I-SNQ 6.2 RADAR
VGSI and ILS glidepath not coincident.
I-SNQ 2.9
I-SNQ 1.8



CATEGORY	A	B	C	D
S-ILS 16L	695/18 262 (300-½)	633/18 200 (200-½)		
S-LOC 16L	880/24 447 (500-½)		880/40 447 (500-¾)	880/50 447 (500-1)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NW-1, 14 JAN 2010 to 11 FEB 2010

ILS or LOC RWY 16R

SEATTLE-TACOMA INTL (SEA)

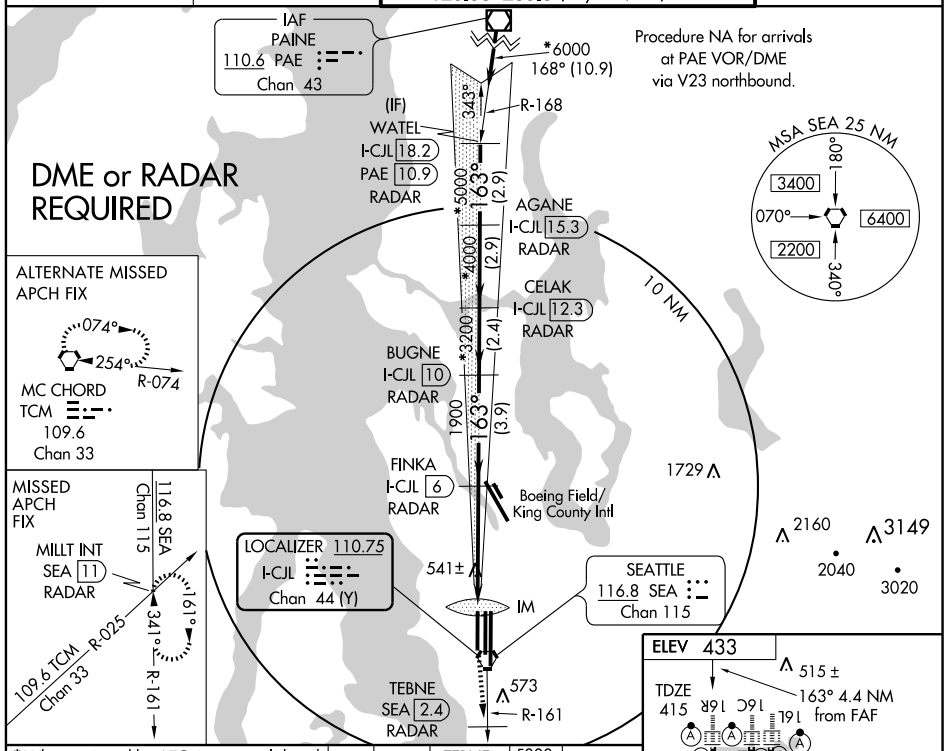
LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	163°	TDZE	415
Chan 44 (Y)		Apt Elev	433

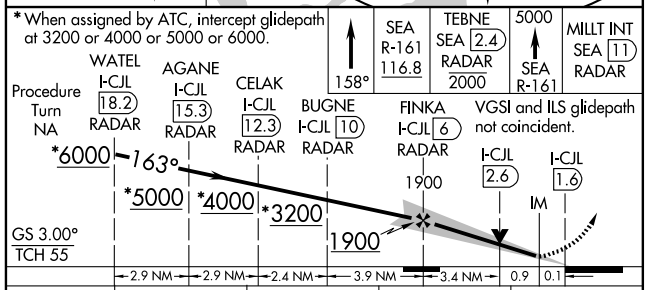
DME or RADAR required.

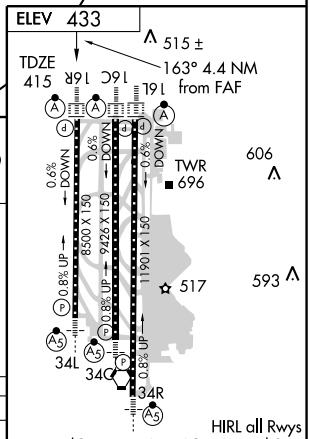
ALSF-2

MISSED APPROACH: Climb heading 158° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/ SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







CATEGORY	A	B	C	D
S-ILS 16R	615/18 200 (200- ½)			
S-LOC 16R	800/24 385 (400- ½)			800/40 385 (400-¾)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON AL-582 (FAA)

LOC/DME I-TUC	APP CRS	Rwy 34C Idg	9426	Rwy 34R Idg	11901
111.7	343°	TDZE	387	TDZE	372
Chan 54		Apt Elev	433	Apt Elev	433

ILS or LOC RWY 34C

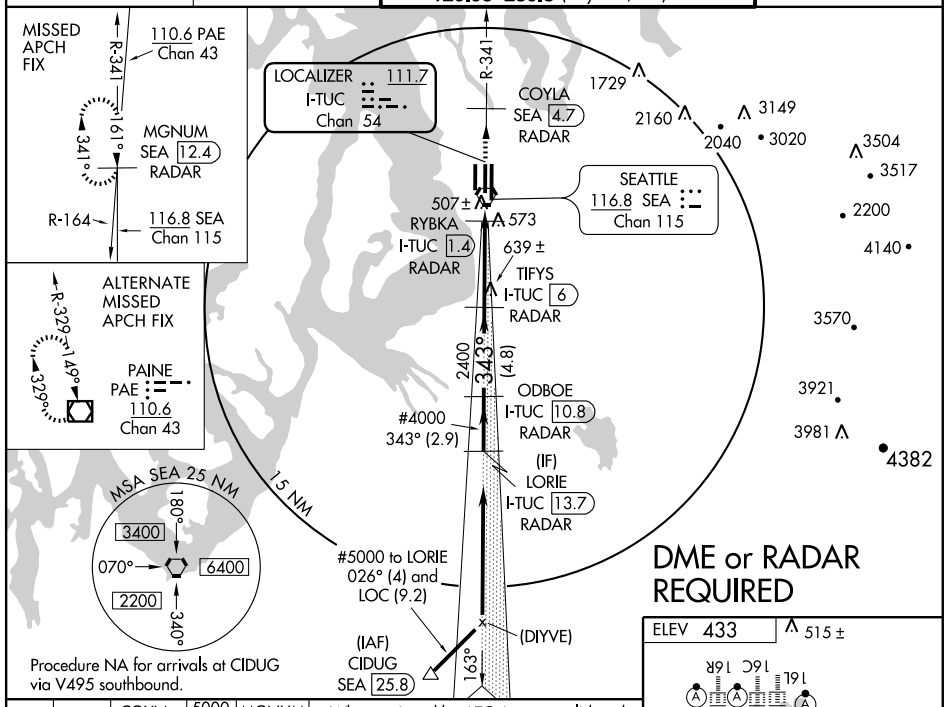
SEATTLE-TACOMA INTL (SEA)

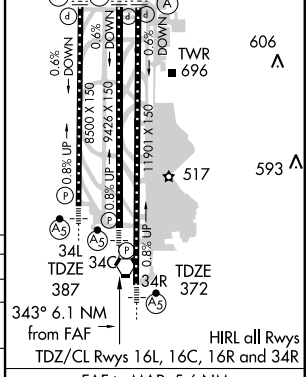
For inoperative MALSR, increase SIDESTEP 34R Cats. A and B visibility to RVR 6000.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.
DME or RADAR required.

MALSR Rwy 34C/R (A5)

MISSED APPROACH: Climb heading 345° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

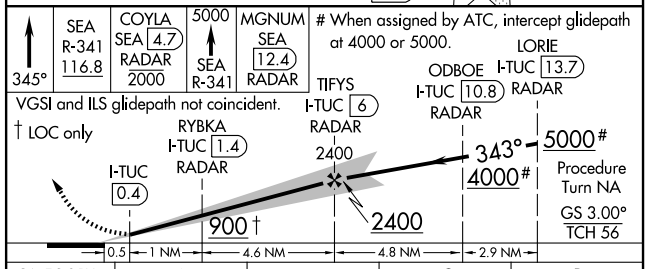
ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7





FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 34C	*587/24 200 (200-½)			
S-LOC 34C	760/24 373 (400-½)			760/40 373 (400-¾)
SIDESTEP 34R	760/50 388 (400-1)		760/60 388 (400-1¼)	760-1¾ 388 (400-1¾)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BEJ	APP CRS	Rwy Idg	8500
110.75	343°	TDZE	379
Chan 44 (Y)		Apt Elev	433

ILS or LOC RWY 34L

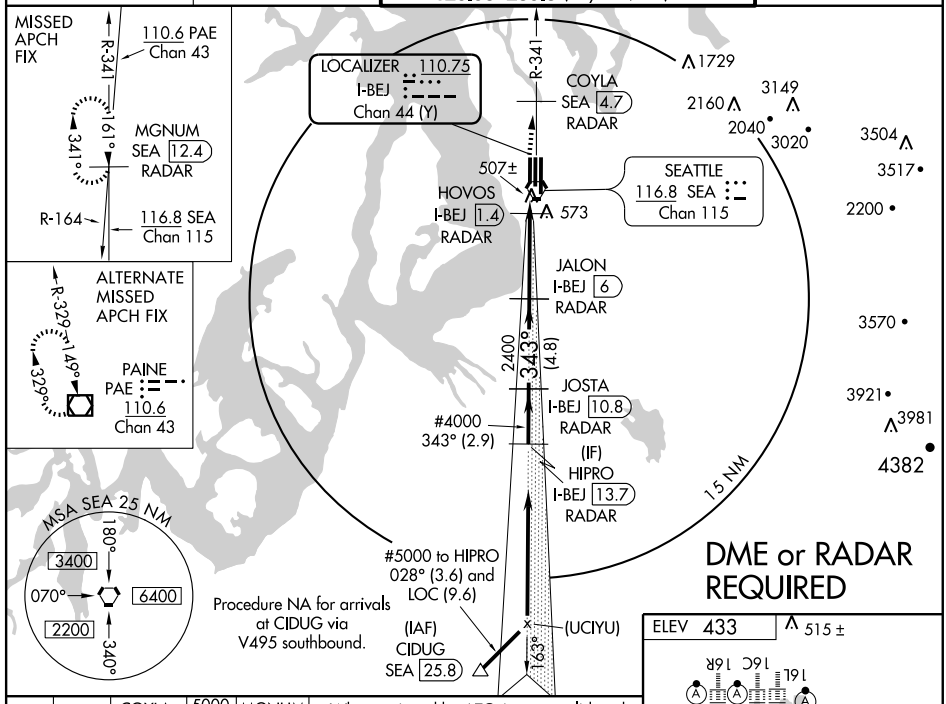
SEATTLE-TACOMA INTL (SEA)

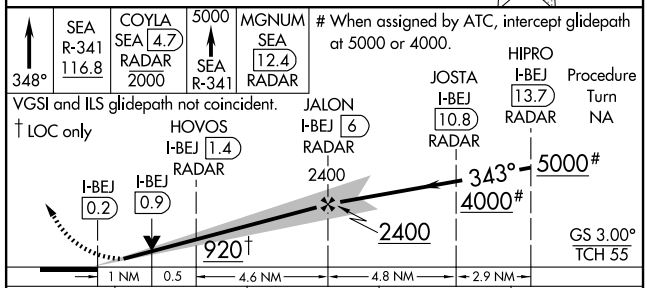
DME or RADAR required.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.

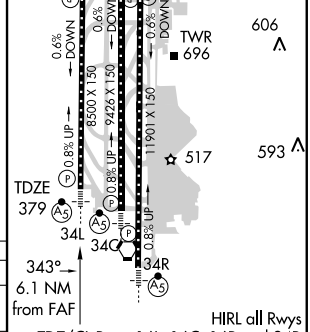
MALSR

MISSED APPROACH: Climb heading 348° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/ RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

CATEGORY	A	B	C	D
S-ILS 34L	*579/24 200 (200-½)			
S-LOC 34L	760/24 381 (400-½)			760/40 381 (400-¾)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON AL-582 (FAA)

LOC/DME I-SEA	APP CRS	Rwy 34R ldg	11901	Rwy 34C ldg	9426
110.3	343°	TDZE	372	TDZE	387
Chan 40		Apt Elev	433	Apt Elev	433

ILS or LOC RWY 34R

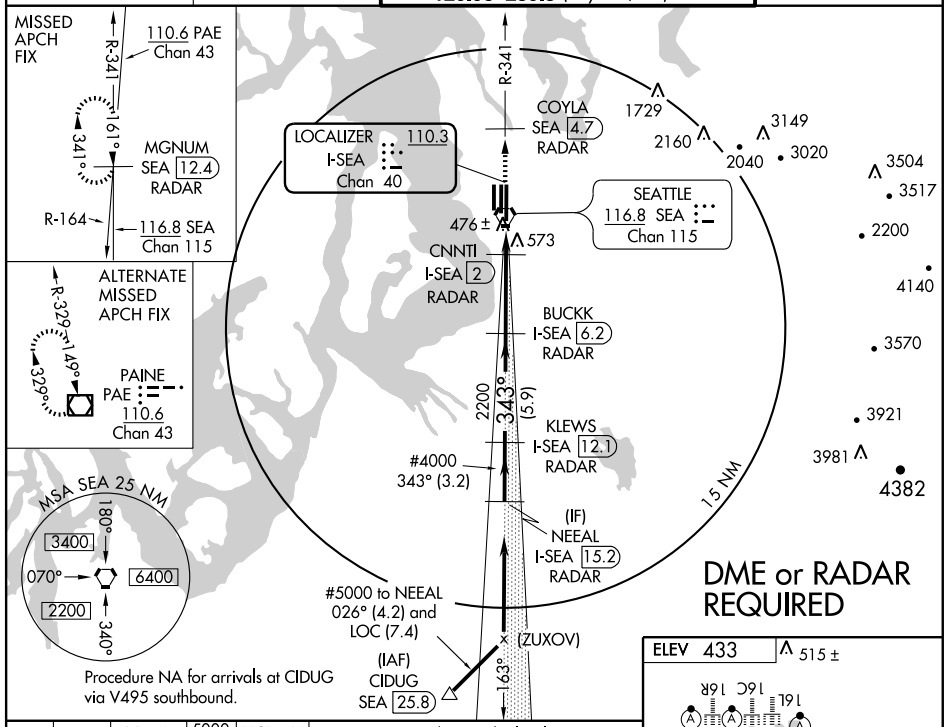
SEATTLE-TACOMA INTL (SEA)

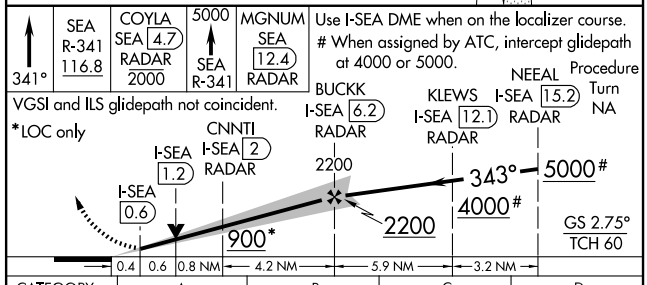
Inoperative table does not apply to SIDESTEP 34C, Cats. A and B.
DME or RADAR required.

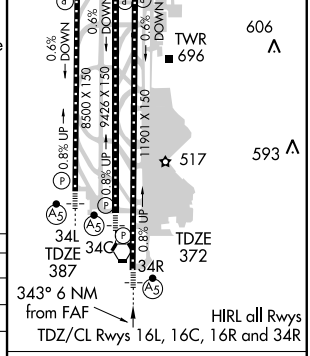
MALSR Rwy 34R/C

MISSED APPROACH: Climb heading 341° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







CATEGORY	A	B	C	D
S-ILS 34R	572/18 200 (200-½)			
S-LOC 34R	720/24 348 (300-½)			
SIDESTEP 34C	760/50 373 (400-1)			760-1½ 373 (400-1½)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

LOC/DME I-SZI	APP CRS	Rwy Idg	9426
111.7	163°	TDZE	430
Chan 54		Apt Elev	433

ILS RWY 16C (CAT II)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF
PAINE
110.6 PAE
Chan 43

*6000
167° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

DME or RADAR REQUIRED

343°
R-167
(IF)
WEMAT
I-SZI 18.2
PAE 10.9
RADAR

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

*5000
163°
(2.9)
ERYKA
I-SZI 15.3
RADAR

*4000
(2.9)
MGNUM
I-SZI 12.4
RADAR

10 NM

*3200
(2.4)
ANVIL
I-SZI 10
RADAR

1900
163°
(3.9)
SODOE
I-SZI 6.1
RADAR

ALTERNATE MISSED APCH FIX
074°
254°
R-074
MC CHORD
TCM
109.6
Chan 33

MISSED APCH FIX
MILLT INT
SEA 11
RADAR
116.8 SEA
Chan 115
161°
341°
R-161
R-025
109.6 TCM
Chan 33

1729
Boeing Field/
King County Intl
2160
3149
2040
3020

LOCALIZER 111.7
I-SZI
Chan 54

529±
IM

SEATTLE
116.8 SEA
Chan 115

TEBNE
SEA 2.4
RADAR

573
R-161

ELEV 433

TDZE
430
515 ±

16R
16C
16L

TWR
696
606
517
593

34L
34C
34R

0.6% DOWN
0.8% UP
8500 X 150
9426 X 150
11901 X 150

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

160°

SEA R-161 116.8	TEBNE SEA 2.4 RADAR 2000	5000 SEA R-161	MILLT INT SEA 11 RADAR

Procedure Turn NA

WEMAT I-SZI 18.2 RADAR
ERYKA I-SZI 15.3 RADAR
MGNUM I-SZI 12.4 RADAR
ANVIL I-SZI 10 RADAR
SODOE I-SZI 6.1 RADAR

VGSI and ILS glidepath not coincident.

*6000
163°
*5000
*4000
*3200
1900
1900
IM
DH
RA 126
430
MSL

GS 3.00°
TCH 57

2.9 NM | 2.9 NM | 2.4 NM | 3.9 NM | 4.3 NM | 836' | 1120'

CATEGORY	A	B	C	D
S-ILS 16C	RA 126/12 100 DA 530			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SZI	APP CRS	Rwy Idg	9426
111.7	163°	TDZE	430
Chan 54		Apt Elev	433

ILS RWY 16C (CAT III)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF
PAINE
110.6 PAE
Chan 43

*6000
167° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

343°
R-167
(IF)
WEMAT
I-SZI 18.2
PAE 10.9
RADAR

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

DME or RADAR REQUIRED
CATEGORY III SPECIAL AUTOLAND EVALUATION REQUIRED

*5000
163°
(2.9)
ERYKA
I-SZI 15.3
RADAR

*4000
(2.9)
MGNUM
I-SZI 12.4
RADAR

10 NM

*3200
(2.4)
ANVIL
I-SZI 10
RADAR

1900
163°
(3.9)

ALTERNATE MISSED APCH FIX
074°
254°
R-074
MC CHORD
TCM
109.6
Chan 33

SODOE
I-SZI 6.1
RADAR

Boeing Field/
King County Intl

1729

2160
3149
2040
3020

MISSED APCH FIX
MILLT INT
SEA 11
RADAR
Chan 115
116.8 SEA
161°
341°
R-161
109.6 TCM
Chan 33
R-025

LOCALIZER 111.7
I-SZI
Chan 54

529±
IM

SEATTLE
116.8 SEA
Chan 115

TEBNE
SEA 2.4
RADAR
573
R-161

ELEV 433

TDZE
430
515 ±

16L 16C 16R

0.6% DOWN
0.8% UP
8500 X 150
9426 X 150
11901 X 150

TWR
696
606
517
593

34L 34C 34R

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

160°
SEA R-161 116.8
TEBNE SEA 2.4 RADAR 2000
5000 SEA R-161
MILLT INT SEA 11 RADAR

Procedure Turn NA
WEMAT I-SZI 18.2 RADAR
ERYKA I-SZI 15.3 RADAR
MGNUM I-SZI 12.4 RADAR
ANVIL I-SZI 10 RADAR
SODOE I-SZI 6.1 RADAR
IM
VGSI and ILS glidepath not coincident.

*6000
163°
*5000
*4000
*3200
1900
1900
534
430 MSL

GS 3.00°
TCH 57

2.9 NM | 2.9 NM | 2.4 NM | 3.9 NM | 4.3 NM | 904' | 1120'

CATEGORY	A	B	C	D
S-ILS 16C		CAT IIIa	RVR 07	
S-ILS 16C		CAT IIIb	RVR 03	
S-ILS 16C		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

LOC/DME I-SNQ	APP CRS	Rwy Idg 11901
110.3	163°	TDZE 433
Chan 40		Apt Elev 433

ILS RWY 16L (CAT II)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/ SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF PAINE 110.6 PAE Chan 43

*6000 166° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

DME or RADAR REQUIRED

R-166 (IF) COROK I-SNQ 18.3 PAE 10.9 RADAR

343° 163° (2.9)

*5000 KENMO I-SNQ 15.4 RADAR

*4000 (2.9)

HELZR I-SNQ 12.5 RADAR

*3200 (2.4)

KARFO I-SNQ 10.1 RADAR

1900 163° (3.9)

10 NM

MSA SEA 25 NM

180° 3400 070° 6400 2200 340°

ALTERNATE MISSED APCH FIX

074° 254° R-074

MC CHORD TCM 109.6 Chan 33

MISSED APCH FIX

MILLT INT SEA 11 RADAR

Chan 115 116.8 SEA

341° 161° R-025 R-161

109.6 TCM Chan 33

DGLAS I-SNQ 6.2 RADAR

Boeing Field/ King County Intl

1729

2160 3149 2040 3020

SEATTLE 116.8 SEA Chan 115

IM 514±

LOCALIZER 110.3 I-SNQ Chan 40

TEBNE SEA 2.4 RADAR 573

R-161

ELEV 433

515 ±

TDZE 433

TWR 696

606

593

517

16L 16C 16R 16L

0.6% DOWN 0.6% DOWN 0.6% DOWN

8500 X 150 9426 X 150 11901 X 150

0.8% UP 0.8% UP 0.8% UP

34L 34C 34R

HIRL all Rwys TDZ/CL Rwys 16L, 16C, 16R and 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

165° SEA R-161 116.8 | TEBNE SEA 2.4 RADAR 2000 | 5000 SEA R-161 | MILLT INT SEA 11 RADAR

COROK I-SNQ 18.3 RADAR | KENMO I-SNQ 15.4 RADAR | HELZR I-SNQ 12.5 RADAR | KARFO I-SNQ 10.1 RADAR | DGLAS I-SNQ 6.2 RADAR

VGSI and ILS glidepath not coincident.

*6000 163° *5000 *4000 *3200 1900 DH RA 125 IM 433 MSL

GS 3.00° TCH 54 Procedure Turn NA

2.9 NM 2.9 NM 2.4 NM 3.9 NM 4.3 NM 895' 1089'

CATEGORY	A	B	C	D
S-ILS 16L	NA	RA 125/12 100 DA 533		

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SNQ	APP CRS	Rwy Idg	11901
110.3	163°	TDZE	433
Chan 40		Apt Elev	433

ILS RWY 16L (CAT III)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 165° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF
PAINE
110.6 PAE
Chan 43

*6000
166° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

DME or RADAR REQUIRED

CATEGORY III SPECIAL AUTOLAND EVALUATION REQUIRED

R-166 (IF)
COROK
I-SNQ 18.3
PAE 10.9
RADAR

343°
163°
(2.9)

*5000
KENMO
I-SNQ 15.4
RADAR

*4000
(2.9)
HELZR
I-SNQ 12.5
RADAR

*3200
(2.4)
KARFO
I-SNQ 10.1
RADAR

1900
(3.9)

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

10 NM

ALTERNATE MISSED APCH FIX
074°
254°
R-074
MC CHORD
TCM
109.6
Chan 33

MISSED APCH FIX
MILLT INT
SEA 11
RADAR
Chan 115
116.8 SEA
341°
161°
R-025
R-161
109.6 TCM
Chan 33

DGLAS
I-SNQ 6.2
RADAR

Boeing Field/
King County Intl

1729

2160
3149
2040
3020

SEATTLE
116.8 SEA
Chan 115

IM
514±

LOCALIZER 110.3
I-SNQ
Chan 40

TEBNE
SEA 2.4
RADAR
573
R-161

ELEV 433
515 ±

TDZE 433
TWR 696
606
593
517

16L 16C 16R
0.6% DOWN
0.8% UP
8500 X 150
9426 X 150
11901 X 150
34L 34C 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

COROK	KENMO	HELZR	KARFO	165°	SEA R-161 116.8	TEBNE SEA 2.4 RADAR 2000	5000 SEA R-161	MILLT INT SEA 11 RADAR
I-SNQ 18.3 RADAR	I-SNQ 15.4 RADAR	I-SNQ 12.5 RADAR	I-SNQ 10.1 RADAR					

DGLAS
I-SNQ 6.2
RADAR

VGSI and ILS glidepath not coincident.

*6000 163° *5000 *4000 *3200 1900 IM 529 433 MSL

GS 3.00°
TCH 54
Procedure Turn NA

2.9 NM 2.9 NM 2.4 NM 3.9 NM 4.3 NM 810′ 1089′

CATEGORY	A	B	C	D
S-ILS 16L	NA	CAT IIIa RVR 07		
S-ILS 16L	NA	CAT IIIb RVR 03		
S-ILS 16L	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	163°	TDZE	415
Chan 44 (Y)		Apt Elev	433

ILS RWY 16R (CAT II)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 158° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/ SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF
PAINE
110.6 PAE
Chan 43

*6000
168° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

343°
R-168

(IF)
WATEL
I-CJL 18.2
PAE 10.9
RADAR

163°
(2.9)

*5000

AGANE
I-CJL 15.3
RADAR

*4000
(2.9)

CELAK
I-CJL 12.3
RADAR

*3200
(2.4)

BUGNE
I-CJL 10
RADAR

1900
163°
(3.9)

FINKA
I-CJL 6
RADAR

10 NM

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

DME or RADAR REQUIRED

ALTERNATE MISSED APCH FIX
074°
254°
R-074
MC CHORD
TCM
109.6
Chan 33

MISSED APCH FIX
MILLT INT
SEA 11
RADAR
116.8 SEA
Chan 115
161°
341°
R-161
109.6 TCM
Chan 33
R-025

LOCALIZER 110.75
I-CJL
Chan 44 (Y)

541±

IM

Boeing Field/ King County Intl

1729

2160
3149
2040
3020

SEATTLE
116.8 SEA
Chan 115

573
TEBNE
SEA 2.4
RADAR
R-161

ELEV 433

TDZE 415

515±

16L 16C 16R

0.6% DOWN
0.8% UP

8500 X 150
9426 X 150
11901 X 150

TWR 696
606
517
593

34L 34C 34R

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

158°

SEA R-161 116.8	TEBNE SEA 2.4 RADAR 2000	5000 SEA R-161	MILLT INT SEA 11 RADAR

Procedure Turn NA

WATEL I-CJL 18.2 RADAR
AGANE I-CJL 15.3 RADAR
CELAK I-CJL 12.3 RADAR
BUGNE I-CJL 10 RADAR
FINKA I-CJL 6 RADAR

VGSI and ILS glidepath not coincident.

*6000 163° *5000 *4000 *3200 1900

DH
RA 139
IM
415
MSL

GS 3.00°
TCH 55

2.9 NM 2.9 NM 2.4 NM 3.9 NM 861′ 1148′

CATEGORY	A	B	C	D
S-ILS 16R	RA 139/12 100 DA 515			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

ILS RWY 16R (CAT III)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	163°	TDZE	415
Chan 44 (Y)		Apt Elev	433

DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb heading 158° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-161 to MILLT INT/ SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

DME or RADAR REQUIRED

CATEGORY III SPECIAL AUTOLAND EVALUATION REQUIRED

IAF PAINE 110.6 PAE Chan 43

*6000 168° (10.9)

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

R-168

(IF) WATEL I-CJL 18.2 PAE 10.9 RADAR

343°

163°

*5000 (2.9)

AGANE I-CJL 15.3 RADAR

*4000 (2.9)

CELAK I-CJL 12.3 RADAR

*3200 (2.4)

BUGNE I-CJL 10 RADAR

1900 (3.9)

FINKA I-CJL 6 RADAR

10 NM

MSA SEA 25 NM

180° 3400 070° 6400 2200 340°

ALTERNATE MISSED APCH FIX

074° 254° R-074

MC CHORD TCM 109.6 Chan 33

MISSED APCH FIX

MILLT INT SEA 11 RADAR

116.8 SEA Chan 115

161° 341° R-161

109.6 TCM R-025 Chan 33

LOCALIZER 110.75 I-CJL Chan 44 (Y)

541±

IM

Boeing Field/ King County Intl

1729

2160 3149 2040 3020

SEATTLE 116.8 SEA Chan 115

TEBNE SEA 2.4 RADAR

573

R-161

ELEV 433

TDZE 415

515 ±

16L 16C 16R

TWR 696

606

517

593

0.6% DOWN

0.8% UP

8500 X 150

9426 X 150

11901 X 150

34L 34C 34R

HIRL all Rwys TDZ/CL Rwys 16L, 16C, 16R and 34R

* When assigned by ATC, intercept glidepath at 3200 or 4000 or 5000 or 6000.

158°

SEA R-161 116.8

TEBNE SEA 2.4 RADAR 2000

5000 SEA R-161

MILLT INT SEA 11 RADAR

Procedure Turn NA

WATEL I-CJL 18.2 RADAR

AGANE I-CJL 15.3 RADAR

CELAK I-CJL 12.3 RADAR

BUGNE I-CJL 10 RADAR

FINKA I-CJL 6 RADAR

IM

VGSI and ILS glidepath not coincident.

*6000 163° *5000 *4000 *3200 1900 1900 515 415 MSL

GS 3.00° TCH 55

2.9 NM 2.9 NM 2.4 NM 3.9 NM 4.3 NM 852′ 1148′

CATEGORY	A	B	C	D
S-ILS 16R	CAT IIIa	RVR 07		
S-ILS 16R	CAT IIIb	RVR 06		
S-ILS 16R	CAT IIIc	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

LOC/DME I-TUC	APP CRS	Rwy Idg	9426
111.7	343°	TDZE	387
Chan 54		Apt Elev	433

ILS RWY 34C (CAT II)

SEATTLE-TACOMA INTL (SEA)

Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSSPEC approval or LOA for this Rwy. DME or RADAR required.

MALSR

MISSED APPROACH: Climb heading 345° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

MISSED APCH FIX
R-341
161°
341°
110.6 PAE Chan 43
MGNUM SEA 12.4 RADAR
R-164
116.8 SEA Chan 115

ALTERNATE MISSED APCH FIX
R-329
149°
329°
PAINE PAE 110.6 Chan 43

LOCALIZER 111.7 I-TUC Chan 54

R-341
COYLA SEA 4.7 RADAR
1729
2160
2040
3149
3020
3504
3517
2200
4140
SEATTLE 116.8 SEA Chan 115
507±
573
639±
TIFYS I-TUC 6 RADAR
2400
343°
(4.8)
ODBOE I-TUC 10.8 RADAR
#4000
343° (2.9)
(IF) LORIE I-TUC 13.7 RADAR
3570
3921
3981
4382

MSA SEA 25 NM
15 NM
180°
3400
070°
6400
2200
340°

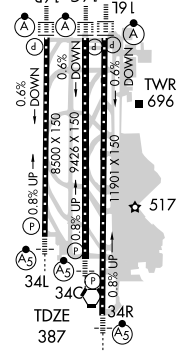
#5000 to LORIE
026° (4) and
LOC (9.2)

(IAF) CIDUG SEA 25.8
163°
(DIYVE)

Procedure NA for arrivals at CIDUG via V495 southbound.

DME or RADAR REQUIRED

ELEV 433
515±

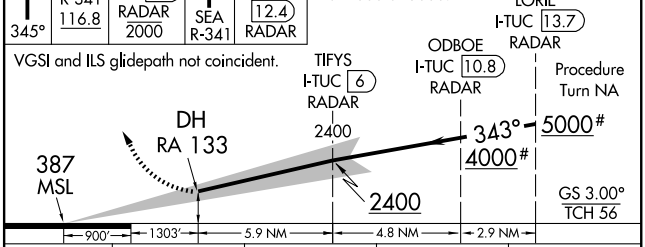


HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

345°	SEA R-341 116.8	COYLA SEA 4.7 RADAR 2000	5000 SEA R-341	MGNUM SEA 12.4 RADAR

When assigned by ATC, intercept glidepath at 4000 or 5000.

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 34C	RA 133/12 100 DA 487			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

ILS RWY 34L (CAT II)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-BEJ	APP CRS	Rwy Idg	8500
110.75	343°	TDZE	379
Chan 44 (Y)		Apt Elev	433

DME or RADAR required.
Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSSEC approval or LOA for this Rwy.

MALSR

MISSED APPROACH: Climb heading 348° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/ RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

MISSED APCH FIX
R-341
110.6 PAE Chan 43
161°
341°
MGNUM SEA 12.4 RADAR
R-164
116.8 SEA Chan 115

ALTERNATE MISSED APCH FIX
R-329
149°
329°
PAINE PAE 110.6 Chan 43

LOCALIZER 110.75 I-BEJ Chan 44 (Y)
R-341
COYLA SEA 4.7 RADAR
SEATTLE 116.8 SEA Chan 115
JALON I-BEJ 6 RADAR
JOSTA I-BEJ 10.8 RADAR
HIPRO I-BEJ 13.7 RADAR
(IF)
2400
343°
(4.8)
#4000
343° (2.9)
15 NM
507±
573
1729
2160
3149
2040
3020
3504
3517
2200
4140
3570
3921
3981
4382

DME or RADAR REQUIRED

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

Procedure NA for arrivals at CIDUG via V495 southbound.
#5000 to HIPRO 028° (3.6) and LOC (9.6)
(IAF) CIDUG SEA 25.8
(UCIYU)
163°

ELEV 433
515 ±
16R 16C 16L
0.6% DOWN
8500 X 150
9426 X 150
11901 X 150
0.8% UP
0.83% UP
TWR 696
606
593
517
TDZE 379
34L
34C
34R

348°	SEA R-341 116.8	COYLA SEA 4.7 RADAR 2000	5000	SEA R-341	MGNUM SEA 12.4 RADAR

When assigned by ATC, intercept glidepath at 5000 or 4000.
Procedure Turn NA
HIPRO I-BEJ 13.7 RADAR
JALON I-BEJ 6 RADAR
JOSTA I-BEJ 10.8 RADAR
VGSI and ILS glidepath not coincident.
DH RA 150
379 MSL
2400
343°
5000#
4000#
2400
GS 3.00°
TCH 55
915'
1294'
5.9 NM
4.8 NM
2.9 NM

CATEGORY	A	B	C	D
S-ILS 34L	RA 150/12 100 DA 479			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

ILS RWY 34R (CAT II)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SEA	APP CRS	Rwy Idg	11901
110.3	343°	TDZE	372
Chan 40		Apt Elev	433

Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Authorization to conduct this approach requires specific OPSSPEC approval or LOA for this Rwy. DME or RADAR required.

MALSR

MISSED APPROACH: Climb heading 341° and SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA VORTAC R-341 to MGNUM/SEA 12.4 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

MISSED APCH FIX

R-341

110.6 PAE Chan 43

161°

341°

MGNUM SEA 12.4 RADAR

R-164

116.8 SEA Chan 115

ALTERNATE MISSED APCH FIX

R-329

149°

329°

PAINE PAE 110.6 Chan 43

MSA SEA 25 NM

180°

3400

070°

6400

2200

340°

LOCALIZER 110.3 I-SEA Chan 40

R-341

COYLA SEA 4.7 RADAR

SEATTLE 116.8 SEA Chan 115

476 ± 573

BUCKK I-SEA 6.2 RADAR

2200

343° (5.9)

KLEWS I-SEA 12.1 RADAR

#4000 343° (3.2)

(IF) NEEAL I-SEA 15.2 RADAR

15 NM

#5000 to NEEAL 026° (4.2) and LOC (7.4)

(ZUXOV)

(IAF) CIDUG SEA 25.8

163°

Procedure NA for arrivals at CIDUG via V495 southbound.

1729

2160

3149

2040

3020

3504

3517

2200

4140

3570

3921

3981

4382

DME or RADAR REQUIRED

ELEV 433

515 ±

606

TWR 696

517

593

TDZE 372

16L 16C 16R

0.6% DOWN

8500 X 150

9426 X 150

11901 X 150

0.8% UP

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

341°

SEA R-341 116.8	COYLA SEA 4.7 RADAR 2000	5000 SEA R-341	MGNUM SEA 12.4 RADAR

Use I-SEA DME when on the localizer course.
When assigned by ATC, intercept glidepath at 4000 or 5000.

VGSI and ILS glidepath not coincident.

BUCKK I-SEA 6.2 RADAR

KLEWS I-SEA 12.1 RADAR

NEEAL I-SEA 15.2 RADAR

Procedure Turn NA

DH RA 200

372 MSL

2200

343°

5000#

4000#

2200

GS 2.75°

TCH 60

1135' 1364' 5.8 NM 5.9 NM 3.2 NM

CATEGORY	A	B	C	D
S-ILS 34R	RA 200/12 100 DA 472			

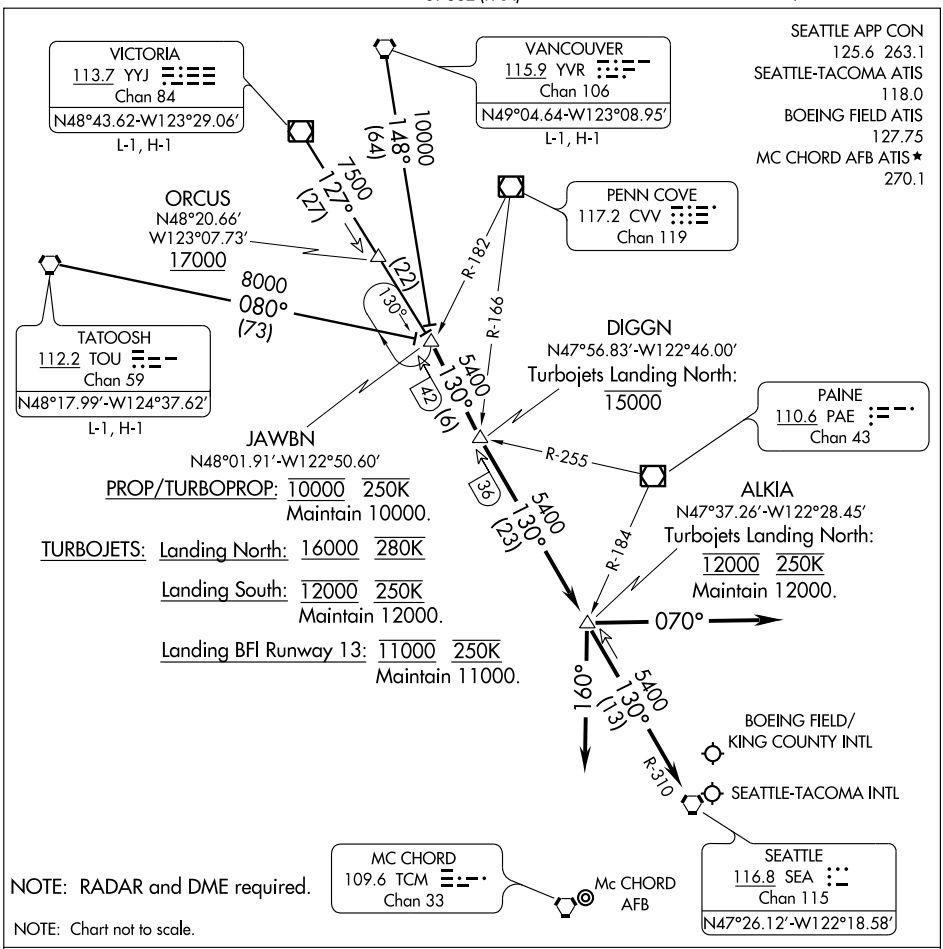
CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

JAWBN ONE ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



PROP/TURBOPROP: 10000 250K
Maintain 10000.

TURBOJETS: Landing North: 16000 280K

Landing South: 12000 250K
Maintain 12000.

Landing BFI Runway 13: 11000 250K
Maintain 11000.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

TATOOSH TRANSITION (TOU.JAWBN1): From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence....

VANCOUVER TRANSITION (YVR.JAWBN1): From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence....

VICTORIA TRANSITION (YYJ.JAWBN1): From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence....

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

LANDING NORTH: Depart ALKIA INT heading 160° for vectors to final approach course.

LANDING SOUTH: Depart ALKIA INT heading 070° for vectors to final approach course.

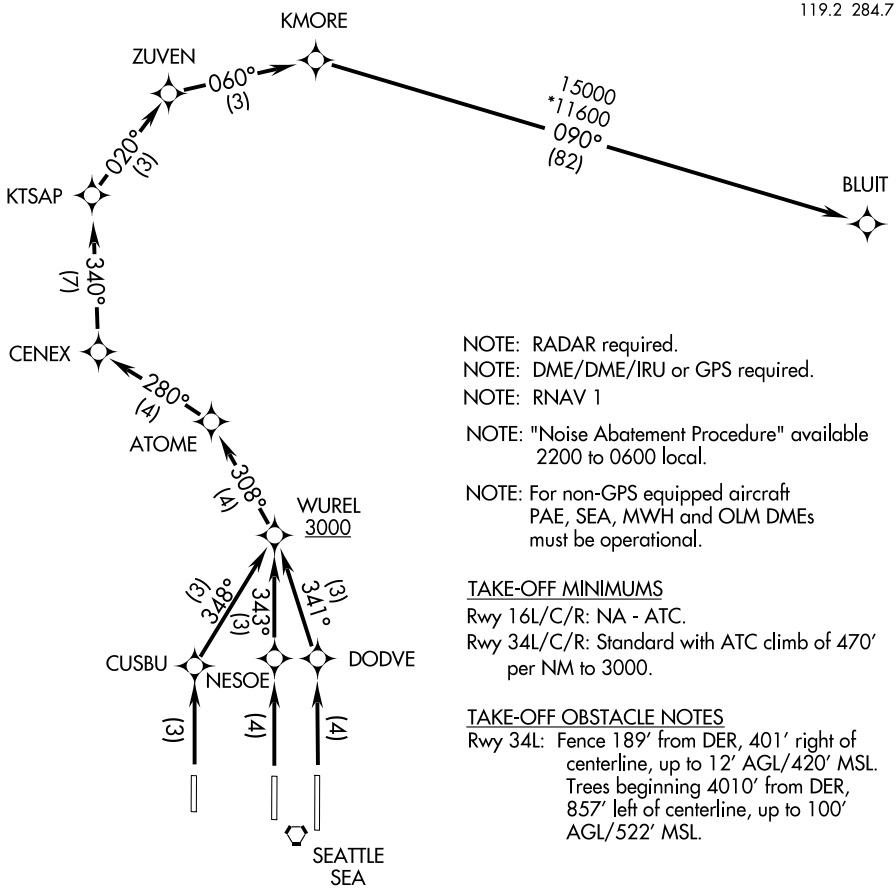
LANDING McCHORD AFB: After ALKIA INT proceed direct SEA VORTAC.

LOST COMMUNICATIONS: After ALKIA INT proceed direct SEA VORTAC.

KMORE TWO DEPARTURE (RNAV)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

ATIS
118.0
SEATTLE DEP CON
119.2 284.7



NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1

NOTE: "Noise Abatement Procedure" available 2200 to 0600 local.

NOTE: For non-GPS equipped aircraft PAE, SEA, MWH and OLM DMEs must be operational.

TAKE-OFF MINIMUMS
Rwy 16L/C/R: NA - ATC.
Rwy 34L/C/R: Standard with ATC climb of 470' per NM to 3000.

TAKE-OFF OBSTACLE NOTES
Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.

NW-1, 14 JAN 2010 to 11 FEB 2010

DEPARTURE ROUTE DESCRIPTION

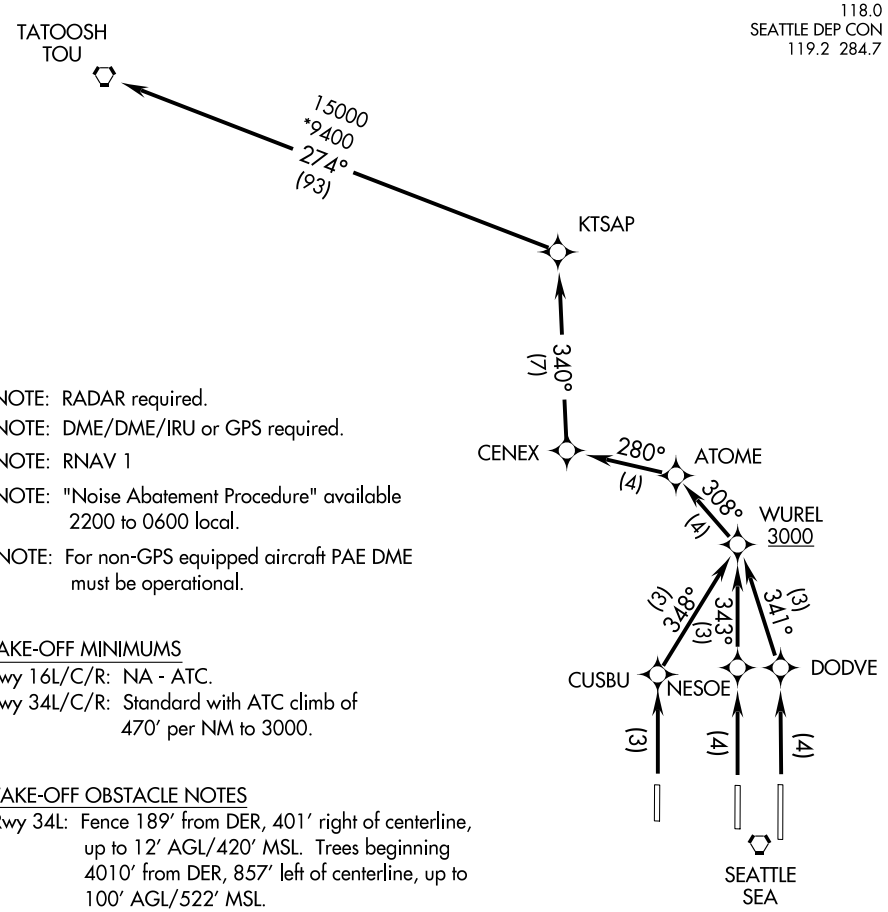
TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to BLUIT, thence. . . .
TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to BLUIT, thence. . . .
TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to BLUIT, thence. . . .

. . . .via assigned route. Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

KTSAP THREE DEPARTURE (RNAV)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

ATIS 118.0
SEATTLE DEP CON 119.2 284.7



NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1

NOTE: "Noise Abatement Procedure" available 2200 to 0600 local.

NOTE: For non-GPS equipped aircraft PAE DME must be operational.

TAKE-OFF MINIMUMS

Rwy 16L/C/R: NA - ATC.

Rwy 34L/C/R: Standard with ATC climb of 470′ per NM to 3000.

TAKE-OFF OBSTACLE NOTES

Rwy 34L: Fence 189′ from DER, 401′ right of centerline, up to 12′ AGL/420′ MSL. Trees beginning 4010′ from DER, 857′ left of centerline, up to 100′ AGL/522′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L: Climb direct CUSBU, then via 348° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

TAKE-OFF RUNWAY 34C: Climb direct NESOE, then via 343° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

TAKE-OFF RUNWAY 34R: Climb direct DODVE, then via 341° track to cross WUREL at or above 3000, then via depicted route to TOU VORTAC, thence. . . .

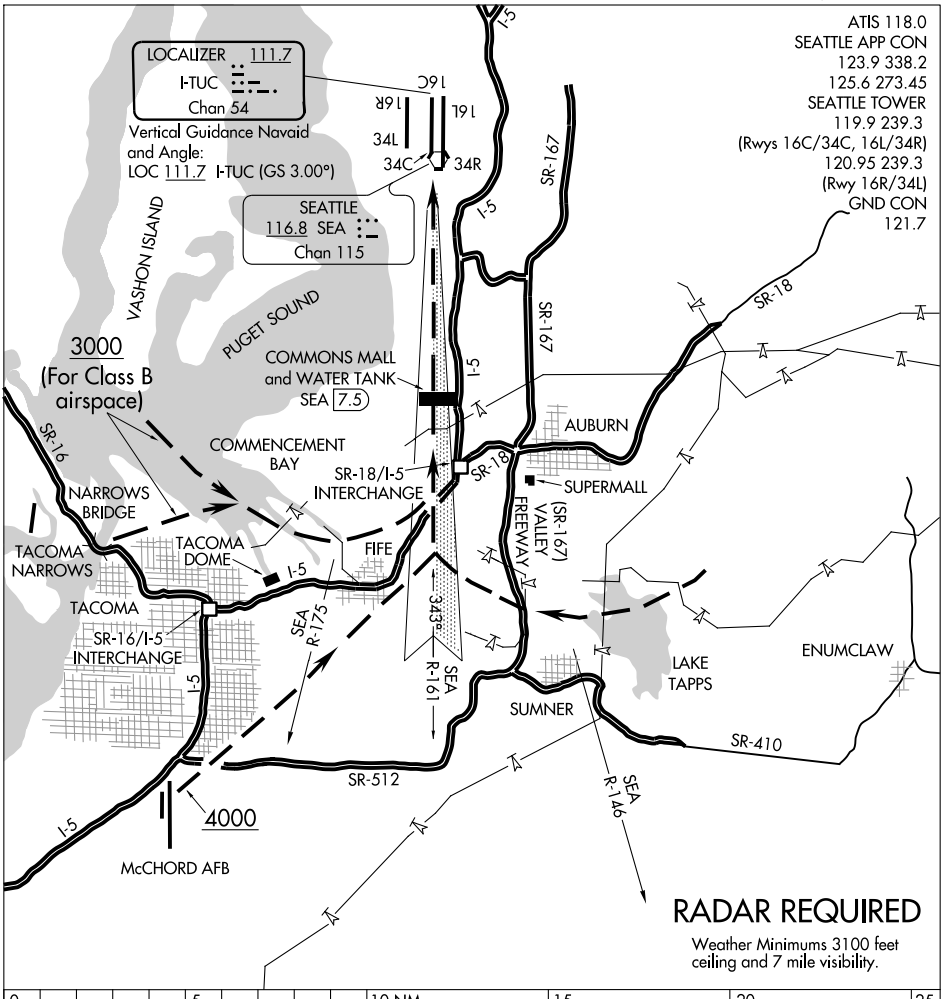
. . . .via assigned route. Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

MALL VISUAL RWY 34C

AL-582 (FAA)

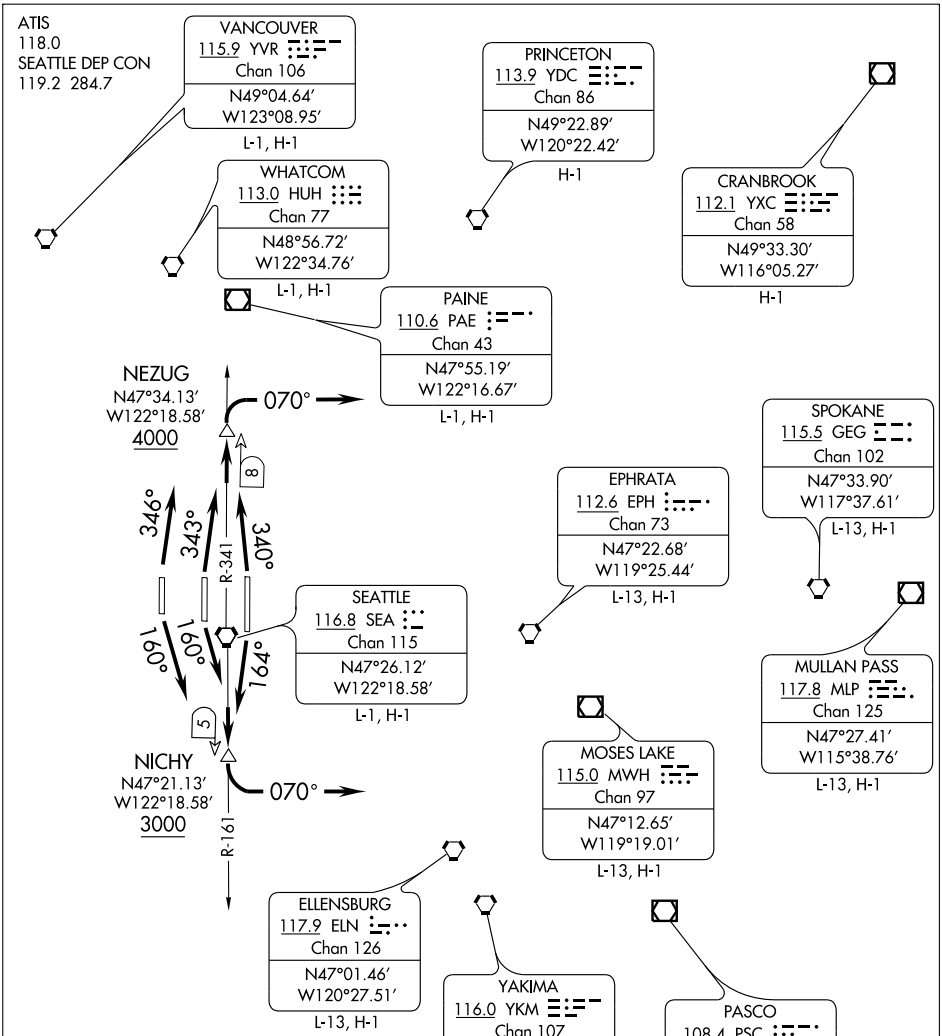
SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



MALL VISUAL APPROACH RWY 34C

When the ceiling is at least 3100' and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord AFB or Lake Tapps for a Mall Visual Runway 34C Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34C as assigned. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to runway 34C.

MOUNTAIN SIX DEPARTURE



NOTE: RADAR and DME required.

TAKE-OFF MINIMUMS

Rwys 16L/C/R, 34 L/C/R: Standard.
Rwy 16L: ATC climb of 560′ per NM to 3000.
Rwy 16C: ATC climb of 515′ per NM to 3000.
Rwy 16R: ATC climb of 500′ per NM to 3000.
Rwys 34L/C/R: ATC climb of 580′ per NM to 4000.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161 to cross NICHY at or above 3000, then left turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAYS 16C/R: Climb heading 160° and SEA R-161 to cross NICHY at or above 3000, then left turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34L: Climb heading 346° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34C: Climb heading 343° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

TAKE-OFF RUNWAY 34R: Climb heading 340° and SEA R-341 to cross NEZUG at or above 4000, then right turn heading 070° for radar vectors to assigned route, thence. . . .

. . . .Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA.

LOST COMMUNICATIONS: If no contact with ATC leaving 4000', proceed direct SEA VORTAC, then proceed on course.

TAKE-OFF OBSTACLE NOTES

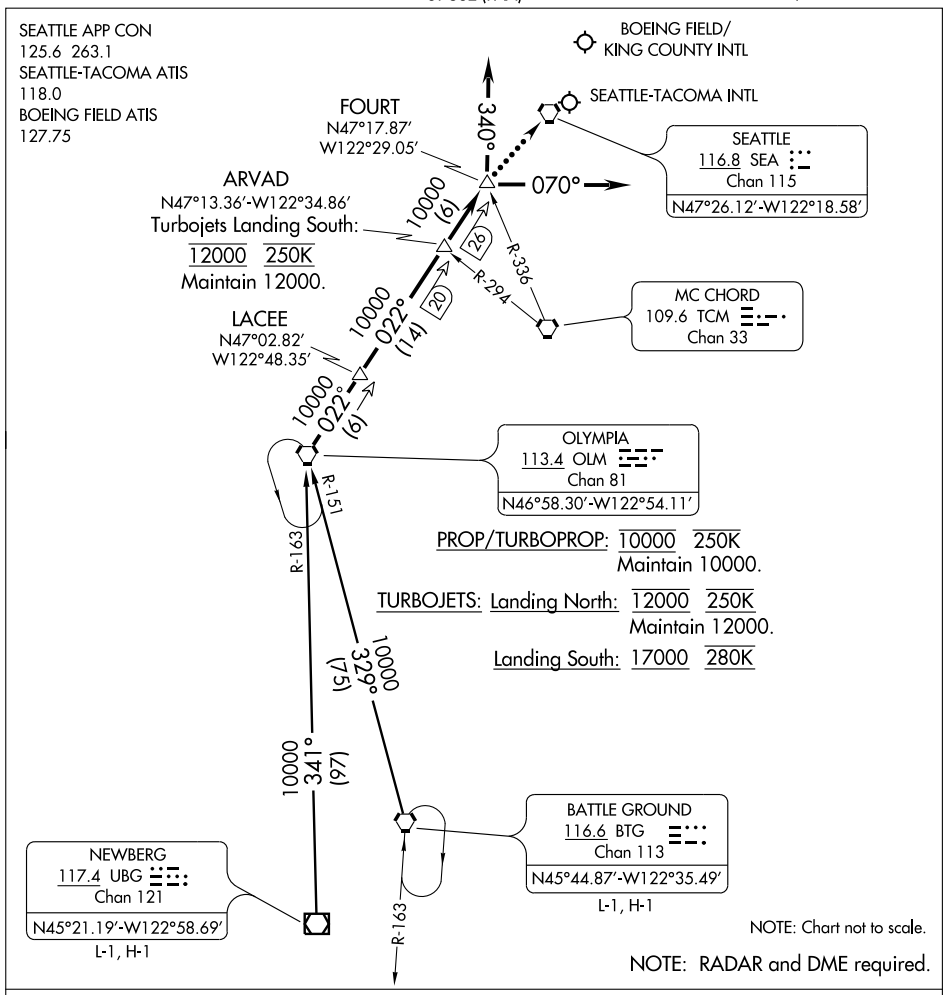
Rwy 16L: Trees beginning 2908' from DER, 1064' right of centerline, up to 100' AGL/476' MSL.
Rwy 16C: Trees beginning 4477' from DER, 484' right of centerline, up to 100' AGL/507' MSL.
Rwy 16R: Trees, antenna on building and light pole beginning 488' from DER, 436' left of centerline, up to 100' AGL/507' MSL. Trees beginning 1137' from DER, 587' right of centerline, up to 100' AGL/468' MSL.
Rwy 34L: Fence 189' from DER, 401' right of centerline, up to 12' AGL/468' MSL. Trees beginning 4010' from DER, 857' left of centerline, up to 100' AGL/522' MSL.

NW-1, 14 JAN 2010 to 11 FEB 2010

OLYMPIA SIX ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



BATTLE GROUND TRANSITION (BTG.OLM6): From over BTG VORTAC via BTG R-329 and OLM R-151 to OLM VORTAC. Thence....

NEWBERG TRANSITION (UBG.OLM6): From over UBG VOR/DME via UBG R-341 and OLM R-163 to OLM VORTAC. Thence....

....From over OLM VORTAC via OLM R-022 to LACEE/OLM 6 DME, then via OLM R-022 to ARVAD INT/OLM 20 DME, then via OLM R-022 to FOURT INT/OLM 26 DME, thence...

LANDING NORTH: Depart FOURT INT/OLM 26 DME heading 070° for vectors to final approach course.

LANDING SOUTH: Depart FOURT INT/OLM 26 DME heading 340° for vectors to final approach course.

LOST COMMUNICATIONS: From over FOURT INT/OLM 26 DME, proceed direct SEA VORTAC.

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	9426
CH 61010	163°	TDZE	430
W16B		Apt Elev	433

RNAV (GPS) RWY 16C

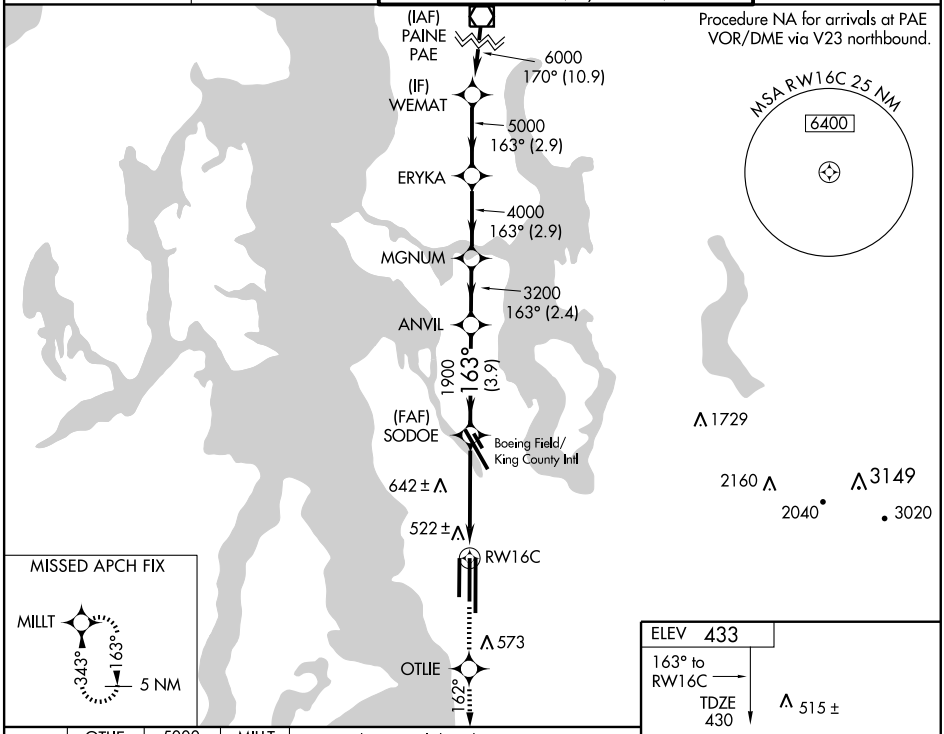
SEATTLE-TACOMA INTL (SEA)

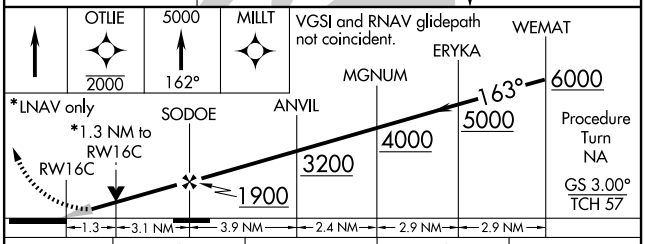
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.
See additional requirements on adjacent information page.

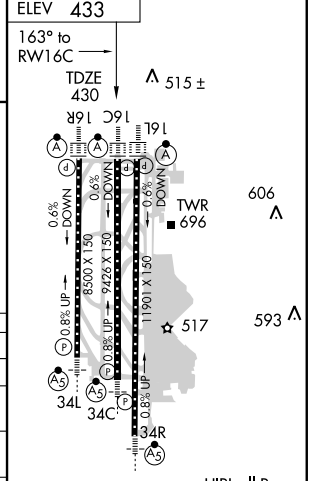
ALSF-2

MISSED APPROACH: Climb direct OTLIE to cross OTLIE at or below 2000, then climb to 5000 via track 162° to MILLT and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

CATEGORY	A	B	C	D
LPV DA		630/24 200 (200-½)		
LNAV/VNAV DA		811/40 381 (400-¾)		
LNAV MDA	920/24 490 (500-½)		920/40 490 (500-¾)	920/50 490 (500-1)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

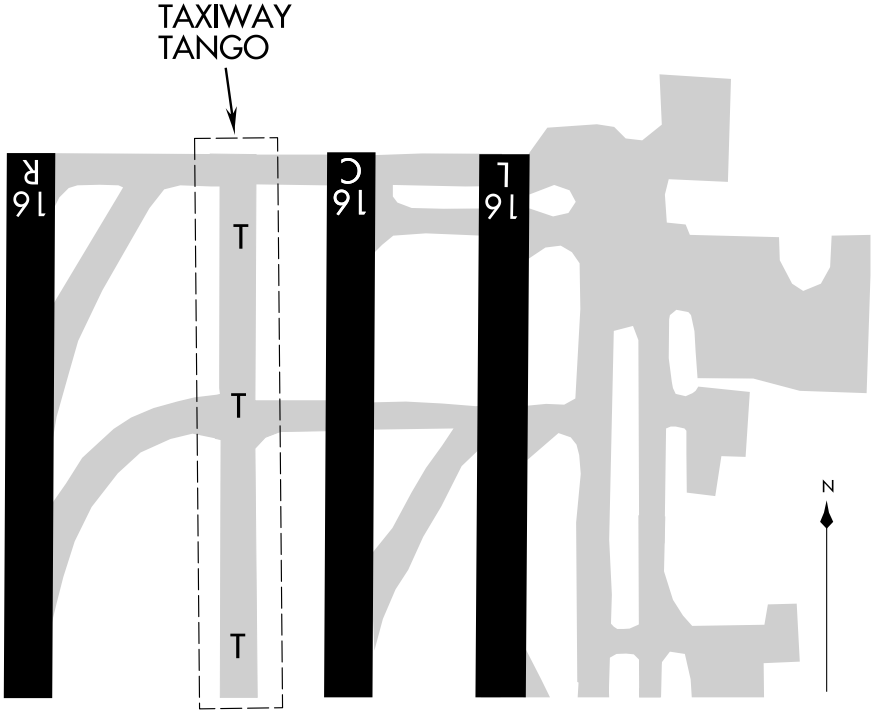
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

TRANSITION TO VISUAL:

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

RECOMMENDTION:

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



WAAS CH 63202 W16A	APP CRS 163°	Rwy Idg 11901 TDZE 433 Apt Elev 433

RNAV (GPS) RWY 16L

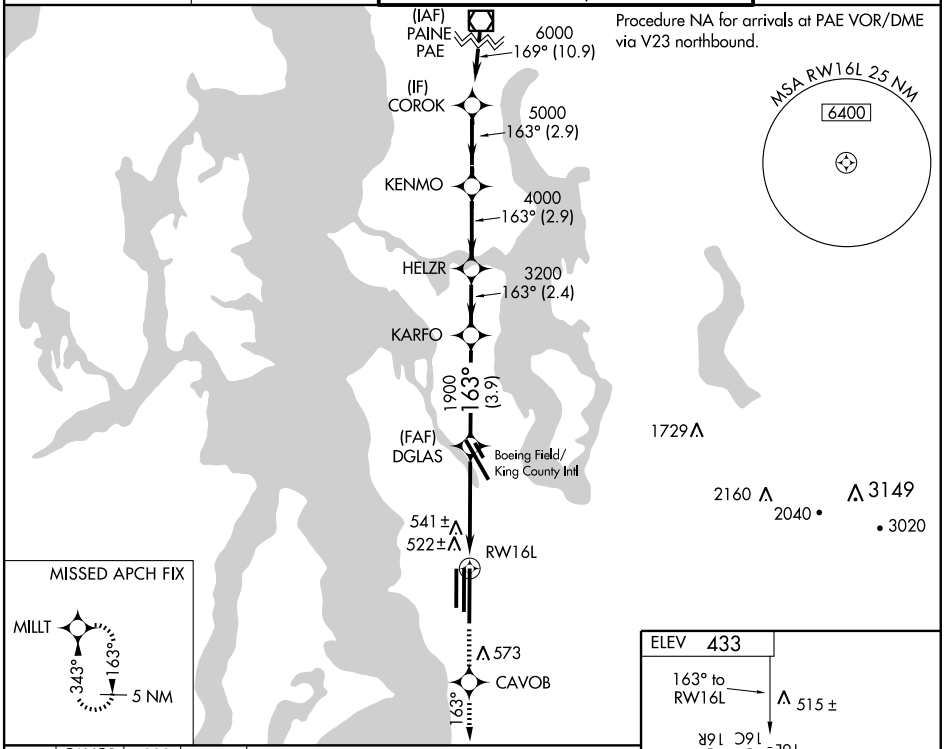
SEATTLE-TACOMA INTL (SEA)

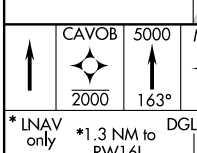
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). DME/DME RNP -0.3 NA. For inoperative ALSF-2, increase LPV all Cats. visibility to RVR 5000.

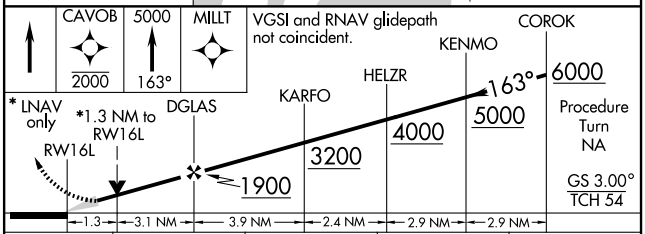
ALSF-2

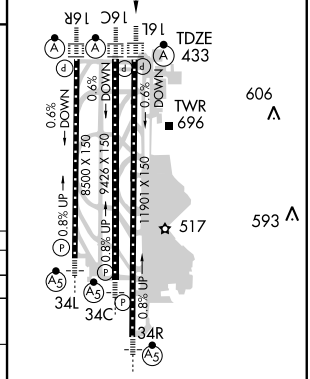
MISSED APPROACH: Climb direct CAVOB to cross CAVOB at or below 2000, then climb to 5000 via track 163° to MILLT and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7









HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

CATEGORY	A	B	C	D
LPV DA		729/24	296 (300-½)	
LNAV/VNAV DA		811/40	378 (400-¾)	
LNAV MDA	920/24	487 (500-½)	920/40 487 (500-¾)	920/50 487 (500-1)
CIRCLING	1000-1	567 (600-1)	1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

WAAS CH 86910 W16D	APP CRS 163°	Rwy Idg 8500 TDZE 415 Apt Elev 433

RNAV (GPS) RWY 16R

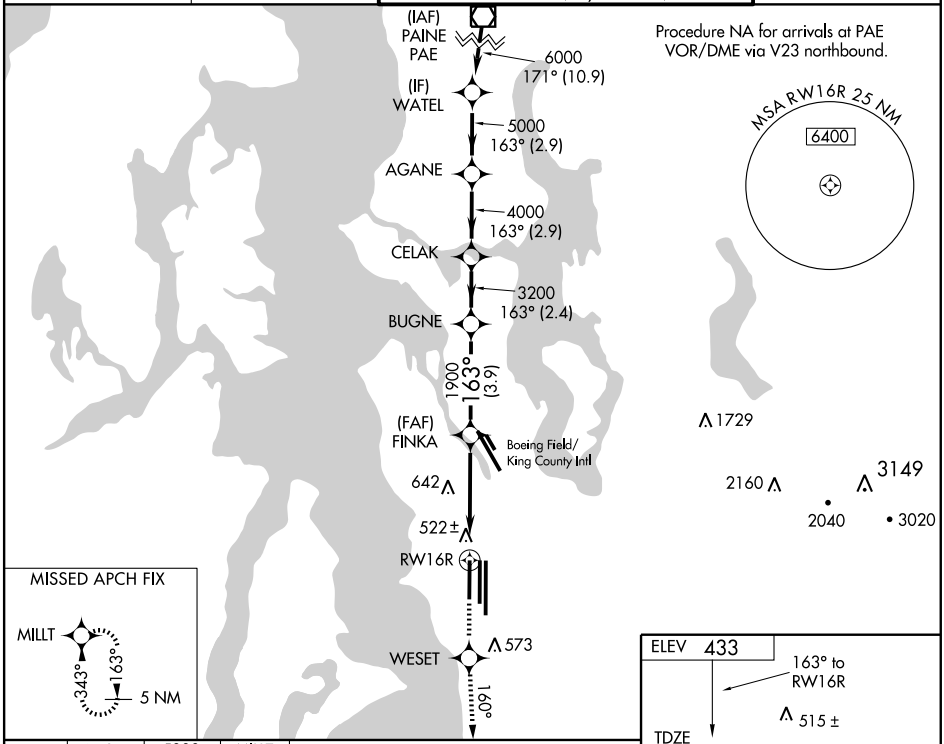
SEATTLE-TACOMA INTL (SEA)

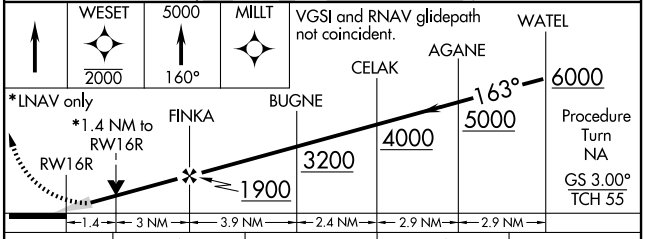
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

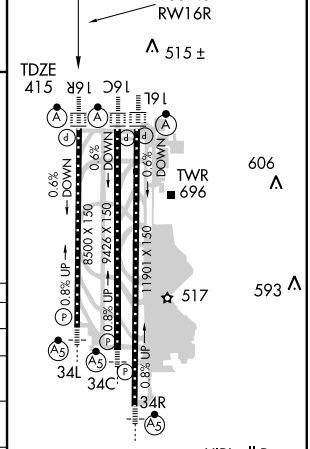
ALSF-2

MISSED APPROACH: Climb direct WESET to cross WESET at or below 2000, then climb to 5000 via track 160° to MILLT and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







CATEGORY	A	B	C	D
LPV DA		615/24 200 (200-½)		
LNAV/VNAV DA		808/40 393 (400-¾)		
LNAV MDA	920/24 505 (500-½)		920/50 505 (500-1)	
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

WAAS	APP CRS	Rwy Idg	9426
CH 77710	343°	TDZE	387
W34B		Apt Elev	433

RNAV (GPS) RWY 34C

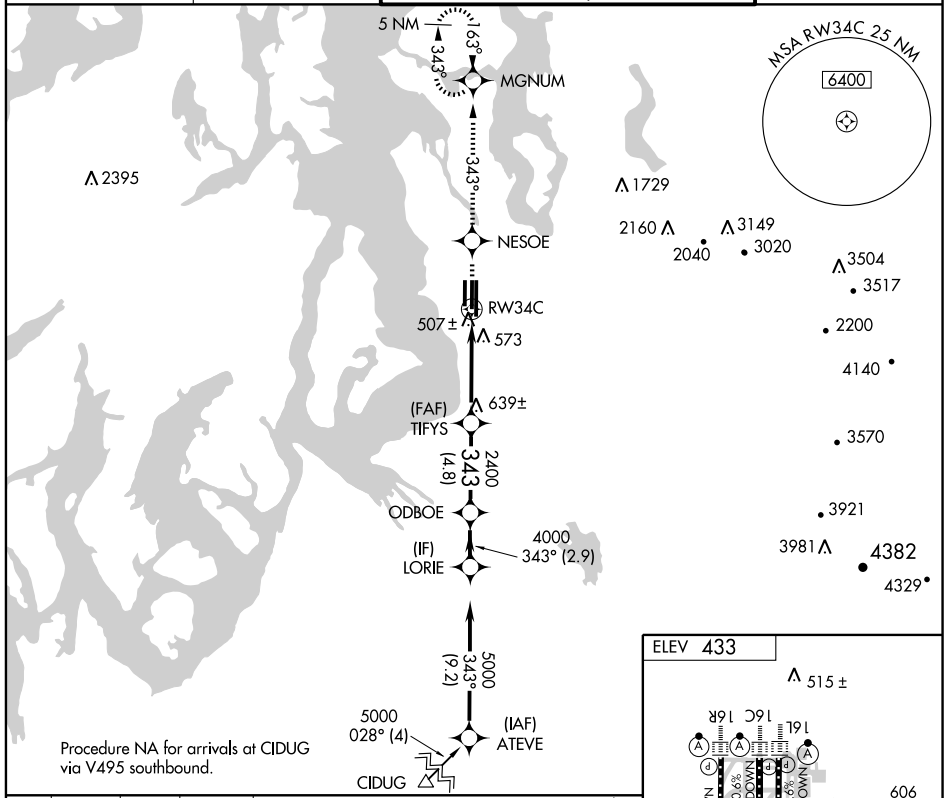
SEATTLE-TACOMA INTL (SEA)

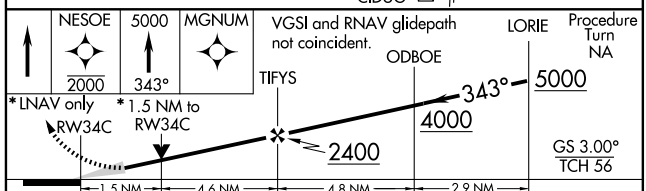
For inoperative MALSR, increase LPV all Cats. visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

MALSR

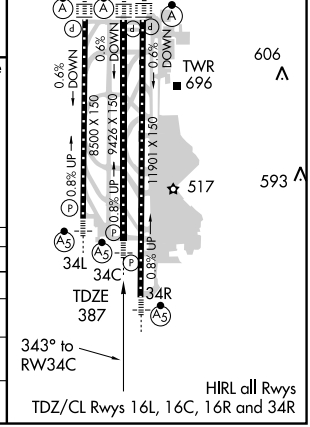
MISSED APPROACH: Climb direct NESOE to cross NESOE at or below 2000, then climb to 5000 via track 343° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7





CATEGORY	A	B	C	D
LPV DA	741/40 354 (400-¾)			
LNAV/VNAV DA	790/50 403 (400-1)			
LNAV MDA	900/24 513 (500-½)		900/50 513 (500-1)	900/60 513 (500-1¼)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)



NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

WAAS	APP CRS	Rwy Idg	8500
CH 45810	343°	TDZE	379
W34D		Apt Elev	433

RNAV (GPS) RWY 34L

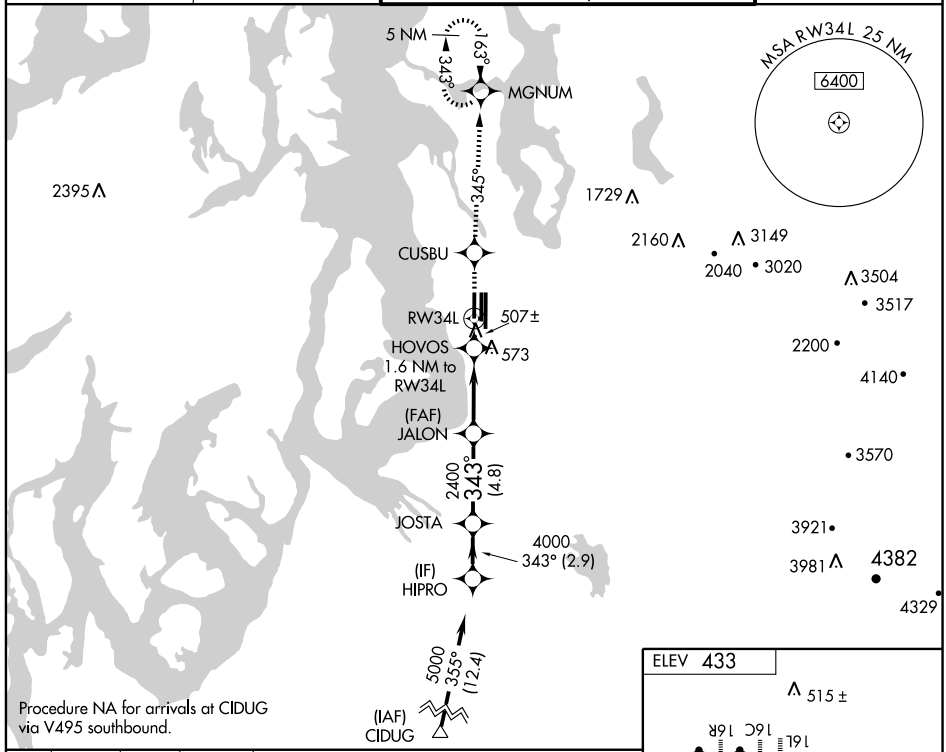
SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

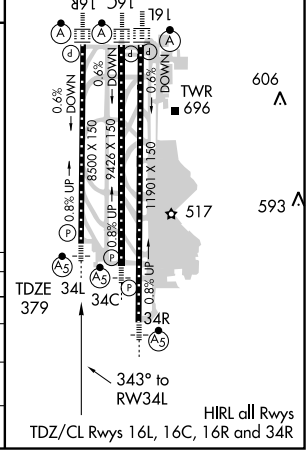
MALSR

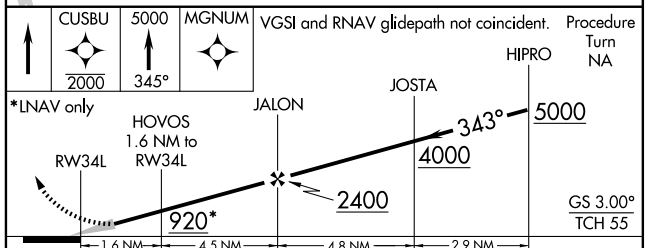
MISSED APPROACH: Climb direct CUSBU to cross CUSBU at or below 2000, then climb to 5000 via track 345° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7



Procedure NA for arrivals at CIDUG via V495 southbound.





CATEGORY	A	B	C	D
LPV DA	579/24 200 (200-½)			
LNAV/VNAV DA	792/50 413 (400-1)			
LNAV MDA	860/24 481 (500-½)		860/40 481 (500-¾)	860/50 481 (500-1)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE, WASHINGTON

AL-582 (FAA)

WAAS	APP CRS	Rwy Idg	11901
CH 42710	343°	TDZE	372
W34A		Apt Elev	433

RNAV (GPS) RWY 34R

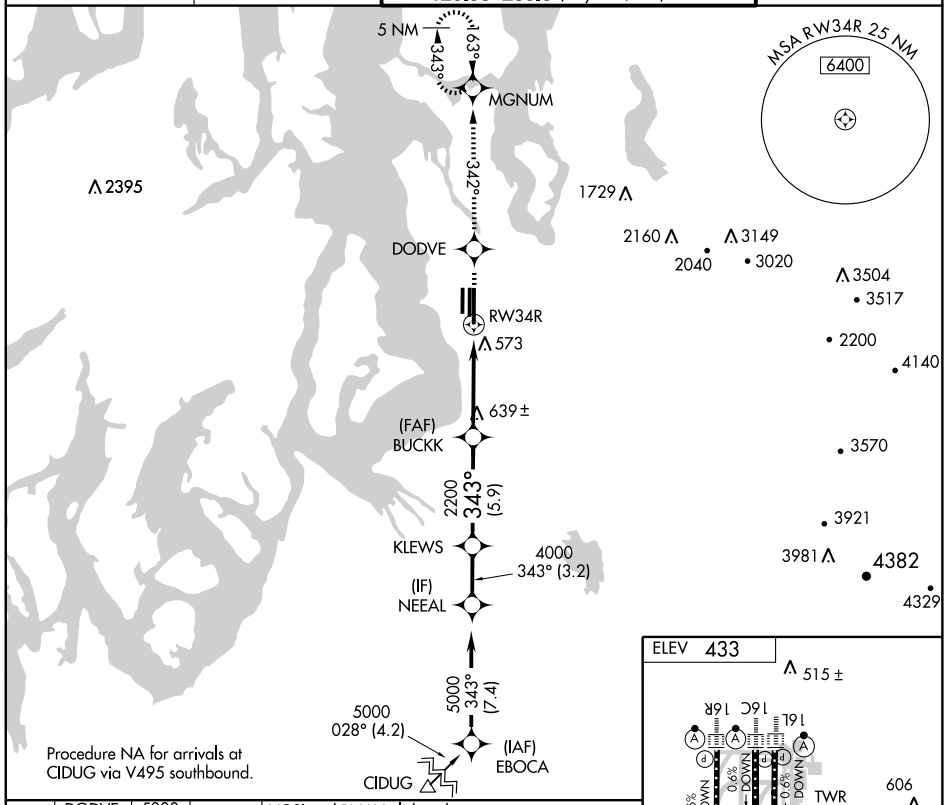
SEATTLE-TACOMA INTL (SEA)

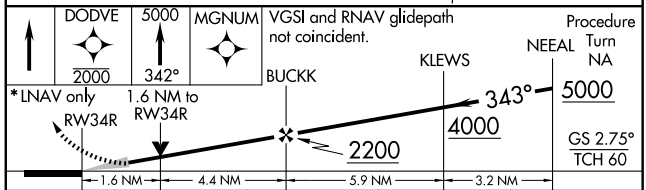
For inoperative MALSR, increase LPV all Cats. visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP -0.3 NA.

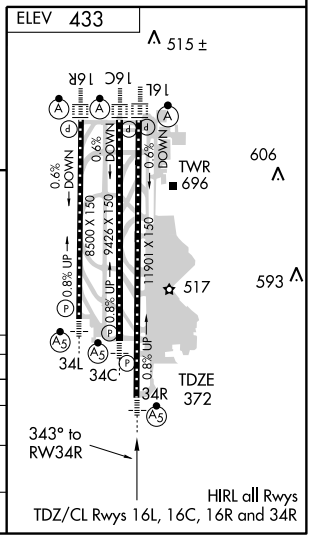
MALSR

MISSED APPROACH: Climb direct DODVE to cross DODVE at or below 2000, then climb to 5000 via track 342° to MGNUM and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







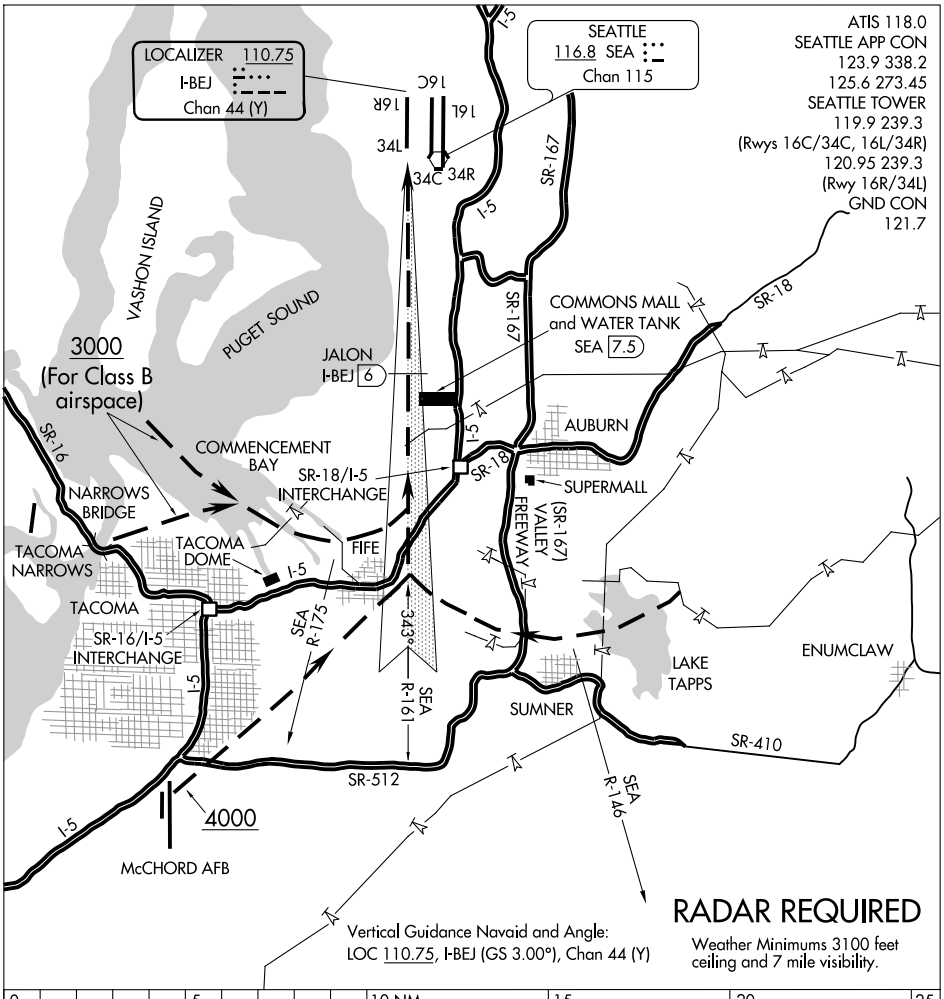
CATEGORY	A	B	C	D
LPV DA	622/24 250 (200-½)			
LNAV/VNAV DA	869-1½ 497 (500-1½)			
LNAV MDA	900/24 528 (500-½)		900/50 528 (500-1)	900/60 528 (500-1¼)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SALTY VISUAL RWY 34L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



SALTY VISUAL APPROACH RWY 34L

When the ceiling is at least 3100′ and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord AFB or Lake Tapps for a Salty Visual Runway 34L Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34L. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to runway 34L.

SEATTLE FOUR DEPARTURE

SL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

ATIS
118.0
SEATTLE DEP CON
119.2 284.7

VANCOUVER
115.9 YVR
Chan 106
N49°04.64′
W123°08.95′
L-1, H-1

WHATCOM
113.0 HUH
Chan 77
N48°56.72′
W122°34.76′
L-1, H-1

PRINCETON
113.9 YDC
Chan 86
N49°22.89′
W120°22.42′
H-1

VICTORIA
113.7 YYJ
Chan 84
N48°43.62′
W123°29.06′
L-1, H-1

PAINE
110.6 PAE
Chan 43
N47°55.19′
W122°16.67′
L-1, H-1

EPHRATA
112.6 EPH
Chan 73
N47°22.68′
W119°25.44′
L-13, H-1

TATOOSH
112.2 TOU
Chan 59
N48°17.99′
W124°37.62′
L-1, H-1

SEATTLE
116.8 SEA
Chan 115
N47°26.12′
W122°18.58′
L-1, H-1

ELLENSBURG
117.9 ELN
Chan 126
N47°01.46′
W120°27.51′
L-13, H-1

HOQUIAM
117.7 HQM
Chan 124
N46°56.82′
W124°08.96′
L-1, H-1

OLYMPIA
113.4 OLM
Chan 81
N46°58.30′
W122°54.11′
L-1, H-1

BATTLE GROUND
116.6 BTG
Chan 113
N45°44.87′
W122°35.49′
L-1, H-1

YAKIMA
116.0 YKM
Chan 107
N46°34.22′
W120°26.68′
L-13, H-1

ASTORIA
114.0 AST
Chan 87
N46°09.70′
W123°52.82′
L-1

NEWBERG
117.4 UBG
Chan 121
N45°21.19′
W122°58.69′
L-1, H-1

EUGENE
112.9 EUG
Chan 76
N44°07.25′
W123°13.37′
L-1, H-1

349° 344° R-341 344°
157° 162° 164° R-161

TAKE-OFF MINIMUMS
Rwy 16L/C/R: Standard.
Rwy 34L/C/R: Standard.

NOTE: RADAR required.

NOTE: Between the hours of 2200 and 0600 local, large turbine powered aircraft departing runways 34L/C/R will be vectored over Puget Sound for noise abatement before proceeding on course.

TAKE-OFF OBSTACLE NOTES

Rwy 16L: Trees beginning 2908′ from DER, 1064′ right of centerline, up to 100′ AGL/476′ MSL.
Rwy 16C: Trees beginning 4477′ from DER, 484′ right of centerline, up to 100′ AGL/507′ MSL.
Rwy 16R: Trees, antenna on building and light pole beginning 488′ from DER, 436′ left of centerline, up to 100′ AGL/507′ MSL. Trees beginning 1137′ from DER, 587′ right of centerline, up to 100′ AGL/468′ MSL.
Rwy 34L: Fence 189′ from DER, 401′ right of centerline, up to 12′ AGL/420′ MSL. Trees beginning 4010′ from DER, 857′ left of centerline, up to 100′ AGL/522′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L: Climb heading 349° and SEA R-341, thence. . . .
TAKE-OFF RUNWAY 34C/R: Climb heading 344° and SEA R-341, thence. . . .
TAKE-OFF RUNWAY 16L: Climb heading 164° and SEA R-161, thence. . . .
TAKE-OFF RUNWAY 16C: Climb heading 162° and SEA R-161, thence. . . .
TAKE-OFF RUNWAY 16R: Climb heading 157° and SEA R-161, thence. . . .

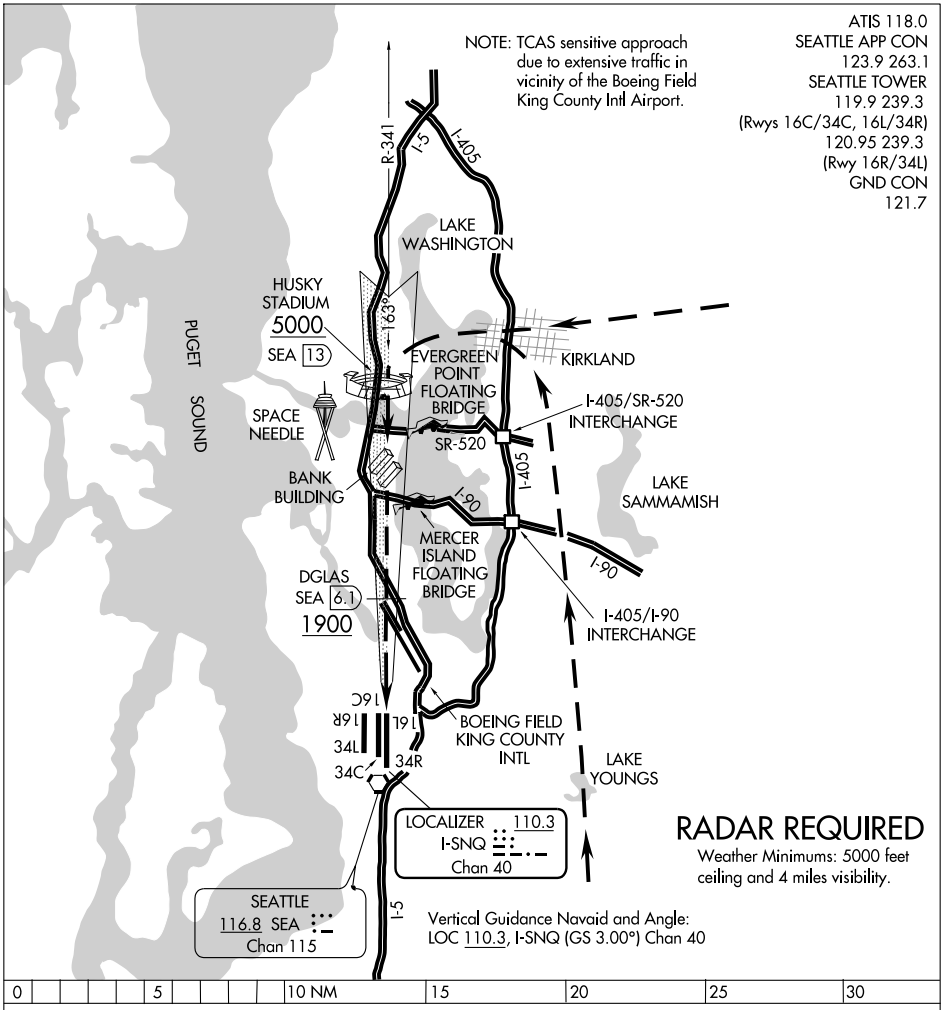
. . . .Maintain assigned altitude, expect radar vectors to assigned route.

NW-1, 14 JAN 2010 to 11 FEB 2010

STADIUM VISUAL RWY 16L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

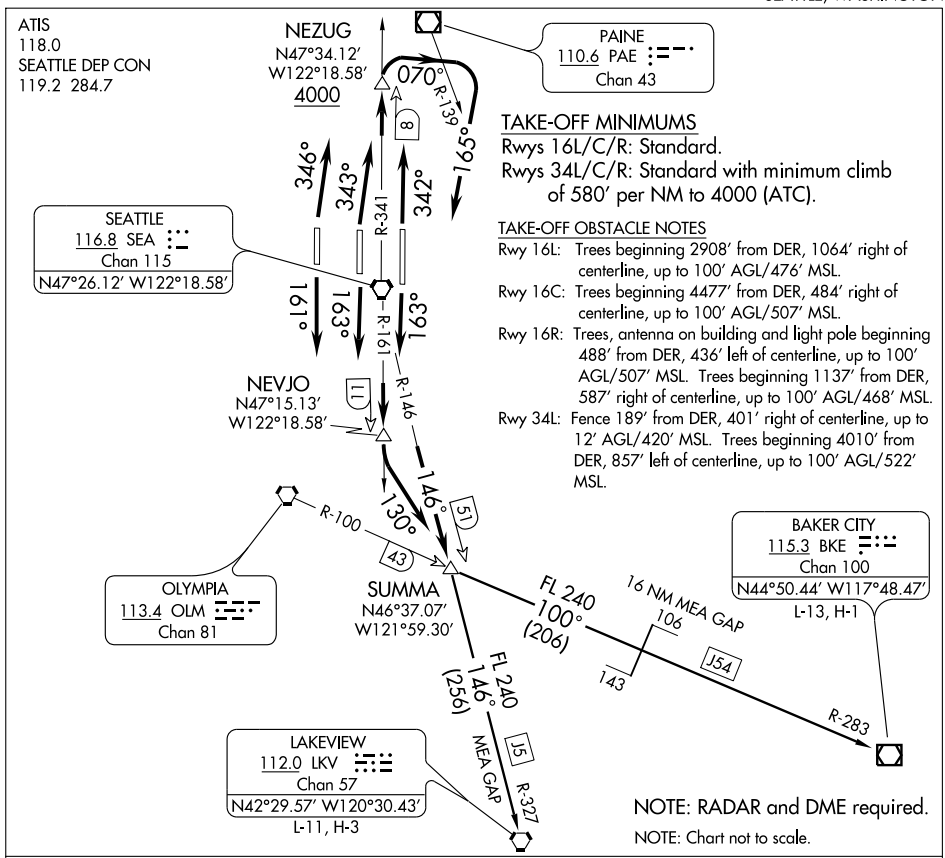


STADIUM VISUAL APPROACH RWY 16L

When the ceiling is at least 5000' and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Stadium Visual Runway 16L Approach. When cleared for a Stadium Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16L localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

SUMMA SEVEN DEPARTURE

SL-582 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34L: Climb heading 346° and SEA R-341, thence. . . .
TAKE-OFF RUNWAY 34C: Climb heading 343° and SEA R-341, thence. . . .
TAKE-OFF RUNWAY 34R: Climb heading 342° and SEA R-341, thence. . . .

. . . .to cross NEZUG at or above 4000, then right turn heading 070° to cross the PAE R-139, then right turn heading 165° to intercept SEA R-146 to SUMMA INT, then via assigned transition.

TAKE-OFF RUNWAYS 16L/C: Climb heading 163° and SEA R-161, thence. . . .
TAKE-OFF RUNWAY 16R: Climb heading 161° and SEA R-161, thence. . . .

. . . .to NEVJO, then left turn heading 130° to intercept the SEA R-146 to SUMMA INT, then via assigned transition.

BAKER CITY TRANSITION (SUMMA7.BKE): From over SUMMA INT via OLM R-100 and BKE R-283 to BKE VOR/DME.

LAKEVIEW TRANSITION (SUMMA7.LKV): From over SUMMA INT via SEA R-146 and LKV R-327 to LKV VORTAC.

SEATTLE, WASHINGTON AL-582 (FAA)

VORTAC SEA 116.8 Chan 115	APP CRS 161°	Rwy 16L Idg 11901 TDZE 433 Apt Elev 433	Rwy 16C Idg 9426 TDZE 430 Apt Elev 433

VOR/DME RWY 16L/C

SEATTLE-TACOMA INTL (SEA)

See additional requirements on adjacent information page.

ALSF-2 Rwy 16L/C

MISSED APPROACH: Climb heading 163° and SEA VORTAC R-161 to cross TEBNE/2.4 DME/RADAR at or below 2000, then climb to 5000 via SEA R-163 to MILLT INT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7

IAF PAINE 110.6 PAE Chan 43

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

MSA SEA 25 NM: 180°–340° 3400; 340°–070° 6400; 070°–180° 2200

2000 164° (16.7)

R-341 R-164

(IF) MGNUM SEA 12.4

10 NM

161° (6.3) 1900

SODOE SEA 6.1

Boeing Field/ King County Intl

1729 642 ± 2160 3149 2040 3020

ZAGNA SEA 1.7

SEATTLE 116.8 SEA Chan 115

573

TEBNE SEA 2.4 RADAR

R-163

MISSED APCH FIX

116.8 SEA Chan 33

MILLT INT SEA 11 RADAR

161° 341° R-161

109.6 TCM Chan 33 R-025

ELEV 433

161° to VORTAC

TDZE 430 515 ±

16R 16C 16L TDZE 433

TWR 696

606 593 517

0.6% DOWN 8500 X 150 9426 X 150 11901 X 150 0.6% DOWN 0.8% UP 0.8% UP

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

MGNUM SEA 12.4 2000 161° 1900 Procedure Turn NA

SODOE SEA 6.1 SEA 3.1 ZAGNA SEA 1.7

163° SEA R-161 116.8

TEBNE SEA 2.4 RADAR 2000

5000 SEA R-163

MILLT INT SEA 11 RADAR

6.3 NM 3 NM 1.4 NM

CATEGORY	A	B	C	D
S-16L	960/24 527 (600-½)		960/50 527 (600-1)	960/60 527 (600-1¼)
S-16C	960/24 530 (600-½)		960/50 530 (600-1)	960/60 530 (600-1¼)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

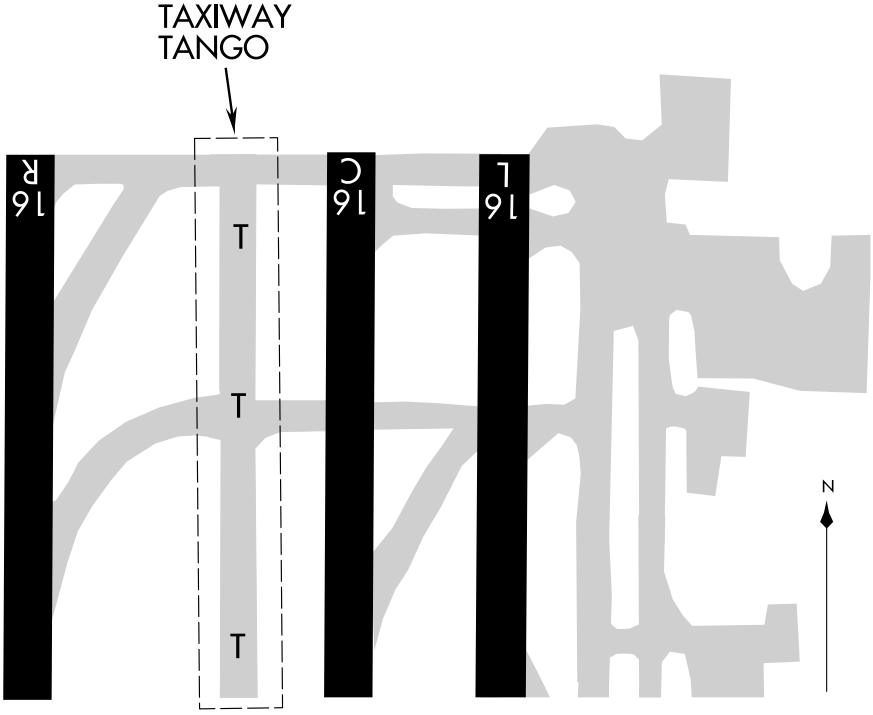
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

TRANSITION TO VISUAL:

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

RECOMMENDTION:

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



SEATTLE, WASHINGTON AL-582 (FAA)

VORTAC SEA	APP CRS	Rwy 34C Idg	9426	Rwy 34R Idg	11901
116.8	341°	TDZE	387	TDZE	372
Chan 115		Apt Elev	433	Apt Elev	433

VOR/DME RWY 34C

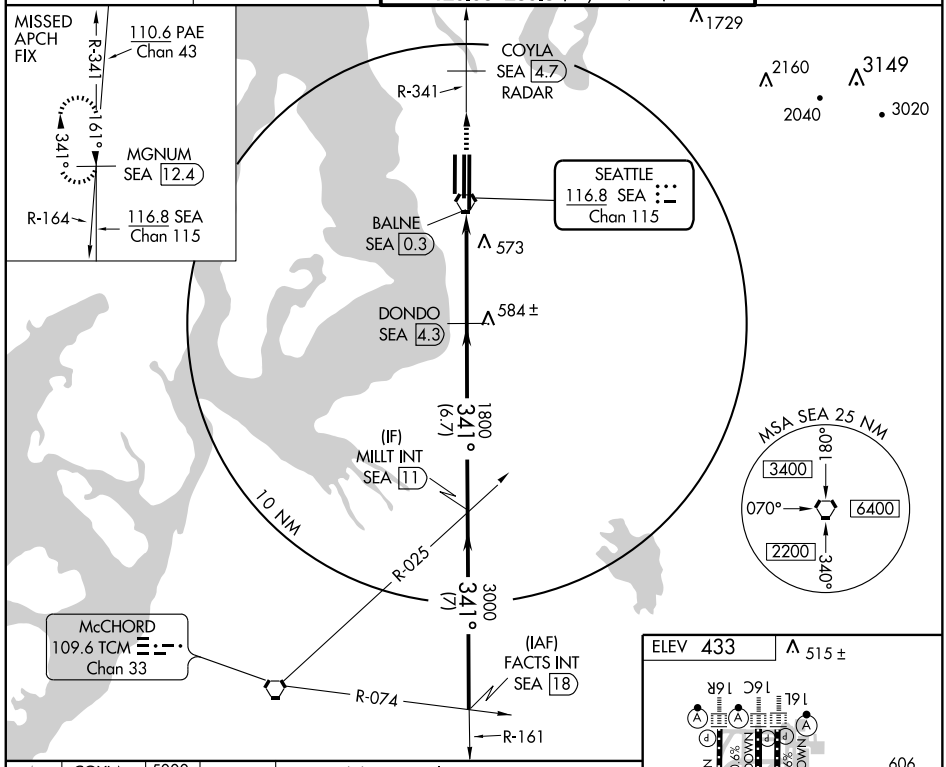
SEATTLE-TACOMA INTL (SEA)

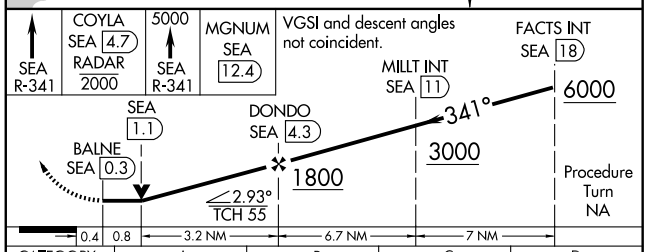
Inoperative table does not apply to sidestep 34R Cats. A and B.

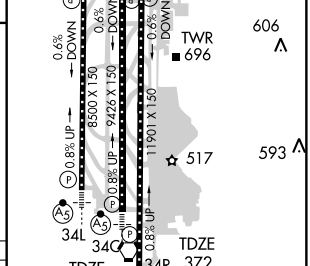
MALSR Rwy 34C/R

MISSED APPROACH: Climb via SEA R-341 to cross COYLA/4.7 DME/RADAR at or below 2000, then climb to 5000 via SEA R-341 to MGNUM/SEA 12.4 DME and hold, continue climb-in-hold to 5000.

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7







CATEGORY	A	B	C	D
S-34C	840/24 453 (500-½)		840/40 453 (500-¾)	840/50 453 (500-1)
SIDESTEP 34R	840/60 468 (500-1¼)			840-1¾ 468 (500-1¾)
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5005
055°	TDZE	270
	Apt Elev	273

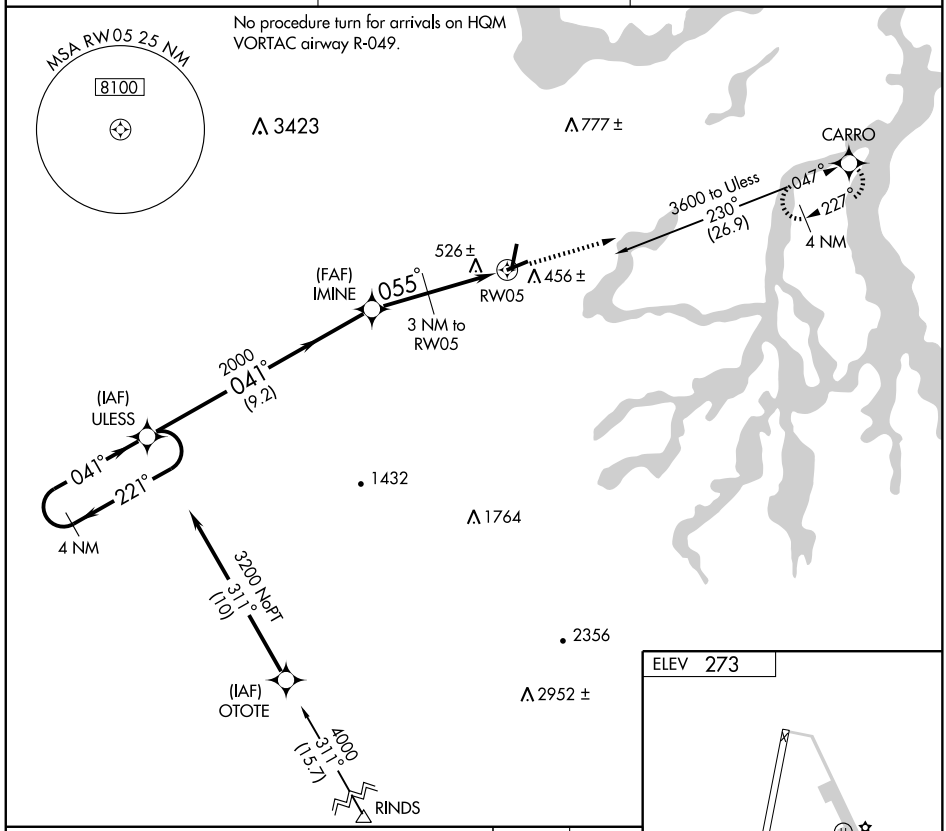
GPS RWY 5

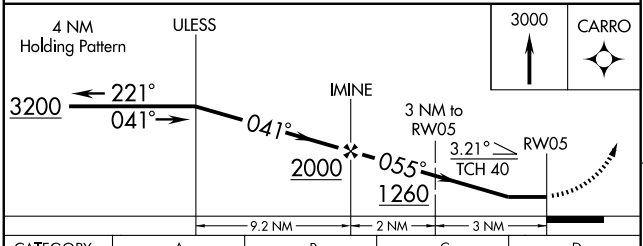
SHELTON/ SANDERSON FIELD (SHN)

NA

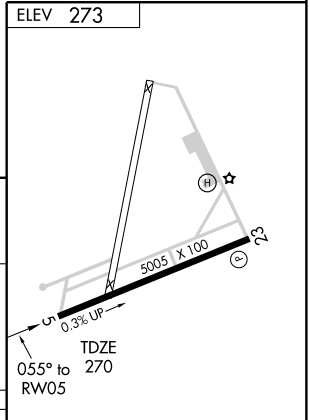
MISSED APPROACH: Climb to 3000 direct CARRO WP and hold.

ASOS	SEATTLE APP CON	UNICOM
119.275	121.1 290.9	122.8 (CTAF)





CATEGORY	A	B	C	D
S-5	780-1	510 (600-1)	780-1½ 510 (600-1½)	780-1¾ 510 (600-1¾)
CIRCLING	840-1	567 (600-1)	940-2 667 (700-2)	1000-2¼ 727 (800-2¼)



REIL Rwy 23
MIRL Rwy 5-23

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5005
229°	TDZE	273
	Apt Elev	273

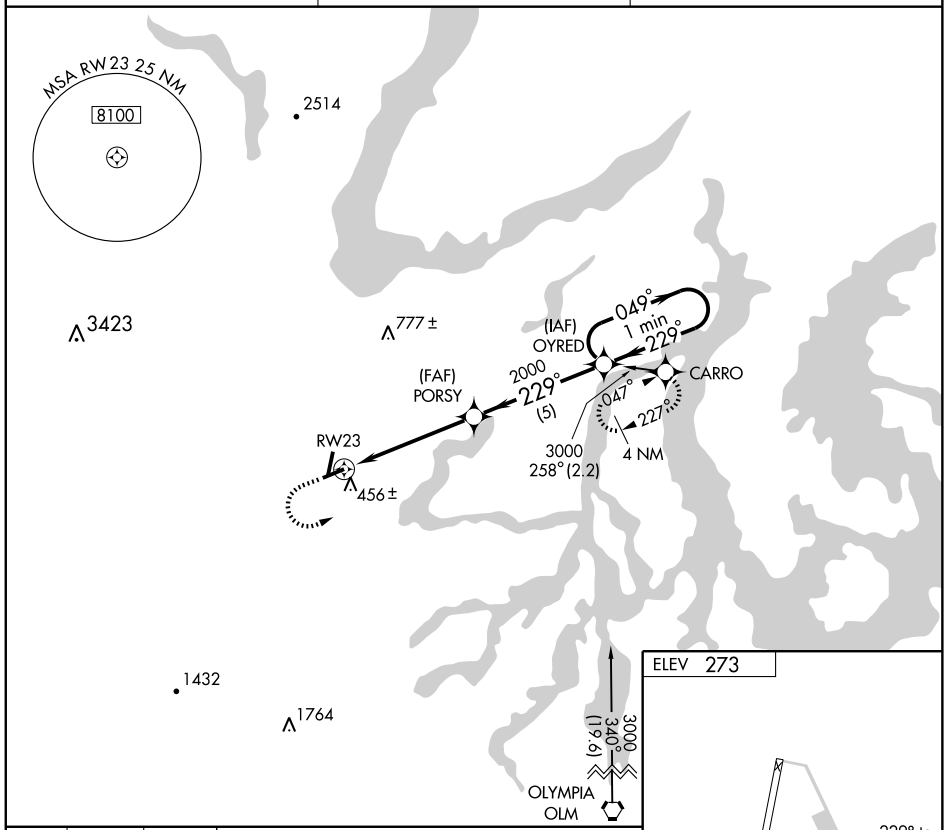
GPS RWY 23

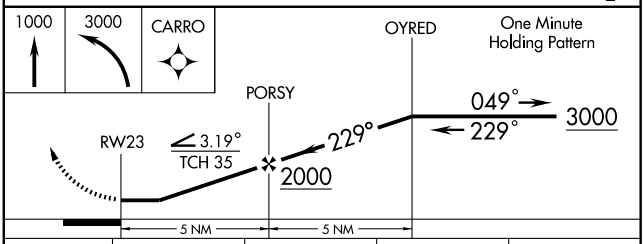
SHELTON/ SANDERSON FIELD (SHN)

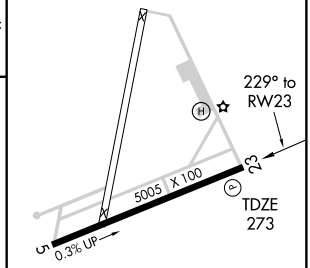
NA

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct CARRO WP and hold.

ASOS	SEATTLE APP CON	UNICOM
119.275	121.1 290.9	122.8 (CTAF)







CATEGORY	A	B	C	D
S-23	860-1	587 (600-1)	860-1½ 587 (600-1½)	860-1¾ 587 (600-1¾)
CIRCLING	860-1	587 (600-1)	940-2 667 (700-2)	1000-2¼ 727 (800-2¼)

REIL Rwy 23
MIRL Rwy 5-23

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB MNC	APP CRS	Rwy Idg	N/A
348	232°	TDZE	N/A
		Apt Elev	273

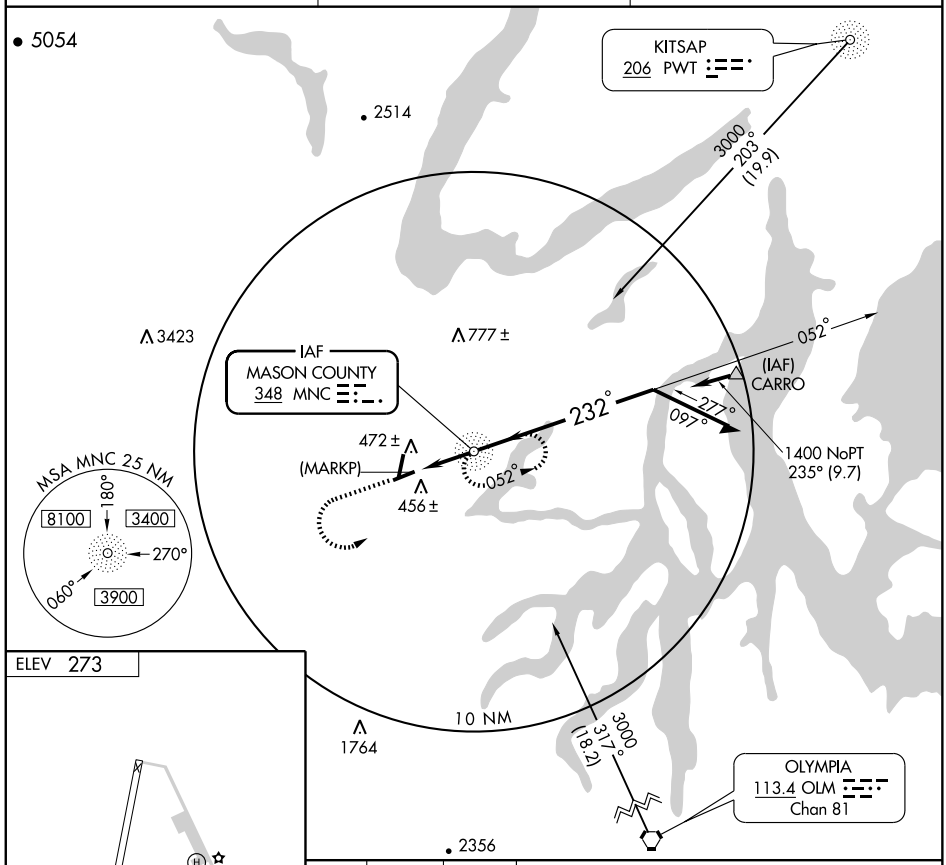
NDB or GPS-A

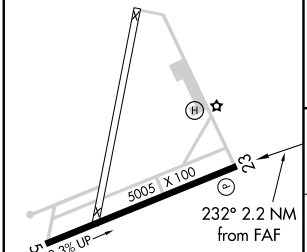
SHELTON/ SANDERSON FIELD (SHN)

NA

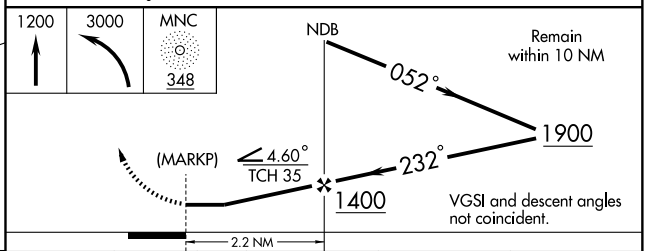
MISSED APPROACH: Climb to 1200 then climbing left turn to 3000 direct MNC NDB and hold.

ASOS	SEATTLE APP CON	UNICOM
119.275	121.1 290.9	122.8 (CTAF)





REIL Rwy 23
MIRL Rwy 5-23



FAF to MAP 2.2 NM					
Knots	60	90	120	150	180
Min:Sec	2:12	1:28	1:06	0:53	0:44

CATEGORY	A	B	C	D
CIRCLING	900-1	627 (700-1)	940-2 667 (700-2)	1000-2¼ 727 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

SNOHOMISH, WASHINGTON

AL-10305 (FAA)

APP CRS	Rwy Idg	N/A
328°	TDZE	N/A
	Apt Elev	22

RNAV (GPS)-A

SNOHOMISH/ HARVEY FIELD (S43)

DME/DME RNP-0.3 NA.
NA Procedure NA at night.
Use Arlington altimeter setting. When not received, use Everett altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 2000 direct USUXY and via 333° track to WATON LOM and hold.

ARLINGTON AWOS-3	SEATTLE CENTER	UNICOM
135.625	128.5 306.9	123.0 (CTAF)

MISSED APCH FIX

WATON AW

162° 342° 4 NM

Procedure NA for arrivals at PAE VOR/DME via V23 northbound.

PAINE PAE

660 787 787 811± 740 860 1463± 610 1655 1480 3580

USUXY 304± 370± 843± 737 678 880±

333° 328° 350° 350° 170°

3100 136° (16.3)

2000 (8.7)

(FAF) DEDBE

(IF/IAF) HAVHO

4 NM

MSA RW33R 25 NM 8100

ELEV 22

15L 15R 0.3% UP 2671 X 36 2430 X 100 33L 33R 328° to RW33R

LIRL Rwy 15L-33R

2000 | USUXY | 333° track | AW | HAVHO | 4 NM Holding Pattern

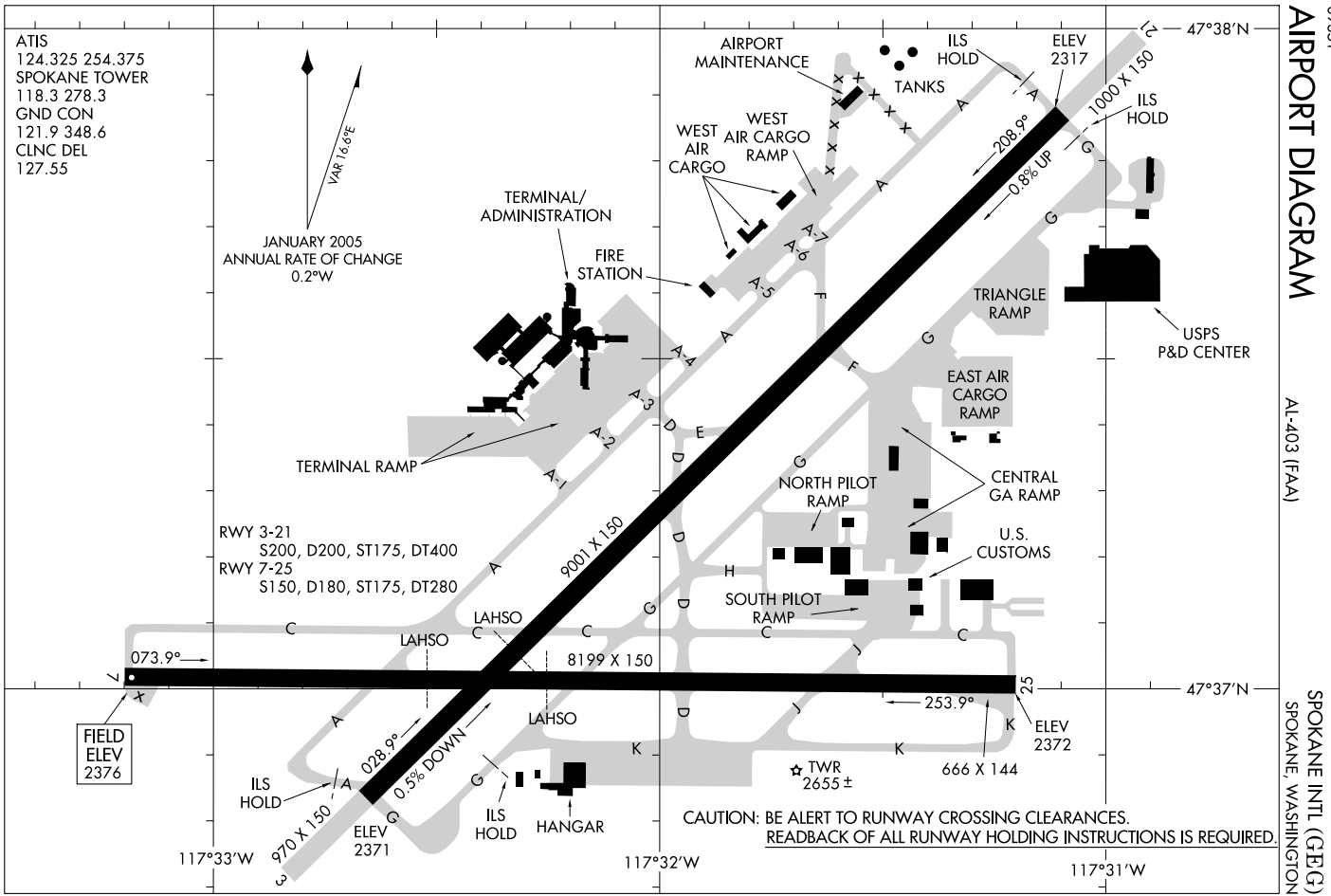
VGSI and descent angles not coincident.

DEDBE 3.67° TCH 30 RW33R 328° 2000 350° 170° 350° 3100

5 NM 8.7 NM

CATEGORY	A	B	C	D
CIRCLING	1220-1¼ 1198 (1200-1¼)	1220-1½ 1198 (1200-1½)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

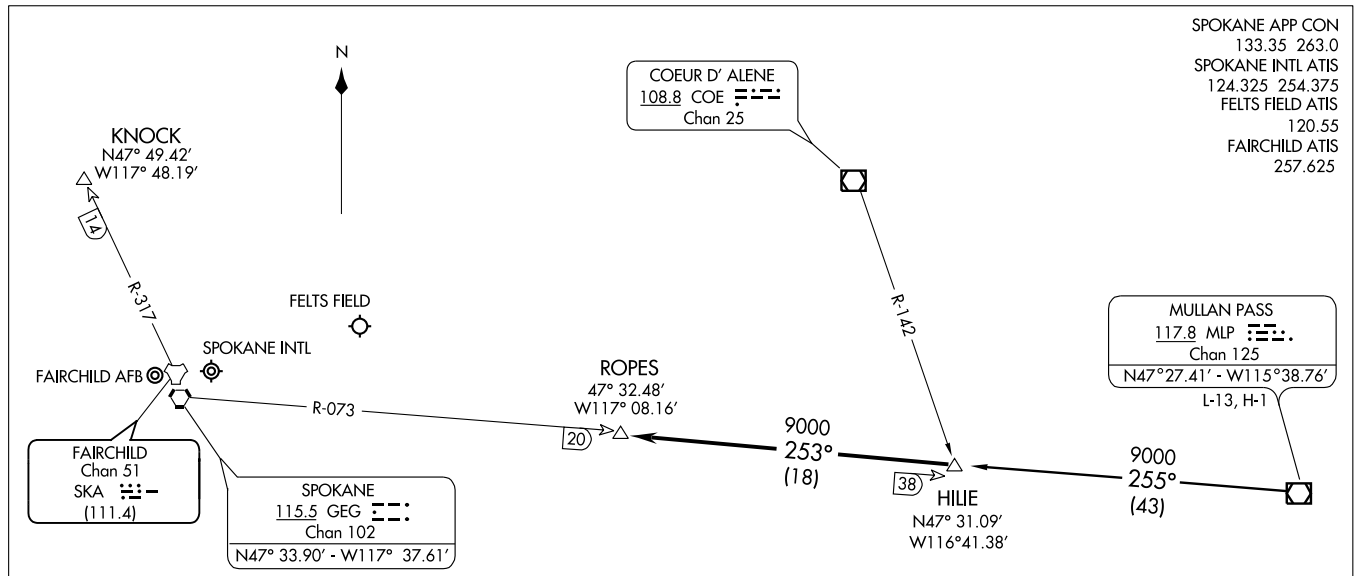


AIRPORT DIAGRAM

AL-403 (FAA)

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

HILIE ONE ARRIVAL (HILIE.HILIE1)



MULLAN PASS TRANSITION (MLP.HILIE1): From over MLP VOR/DME via MLP R-255 to HILIE INT. Thence. . . .

. . . .From over HILIE INT via GEG R-073 to ROPES INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES INT:
Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last altitude to GEG.
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

LOC/DME I-GEG	APP CRS	Rwy Idg	9001
111.1	208°	TDZE	2346
Chan 48		Apt Elev	2376

ILS or LOC/DME RWY 21

SPOKANE INTL (GEG)

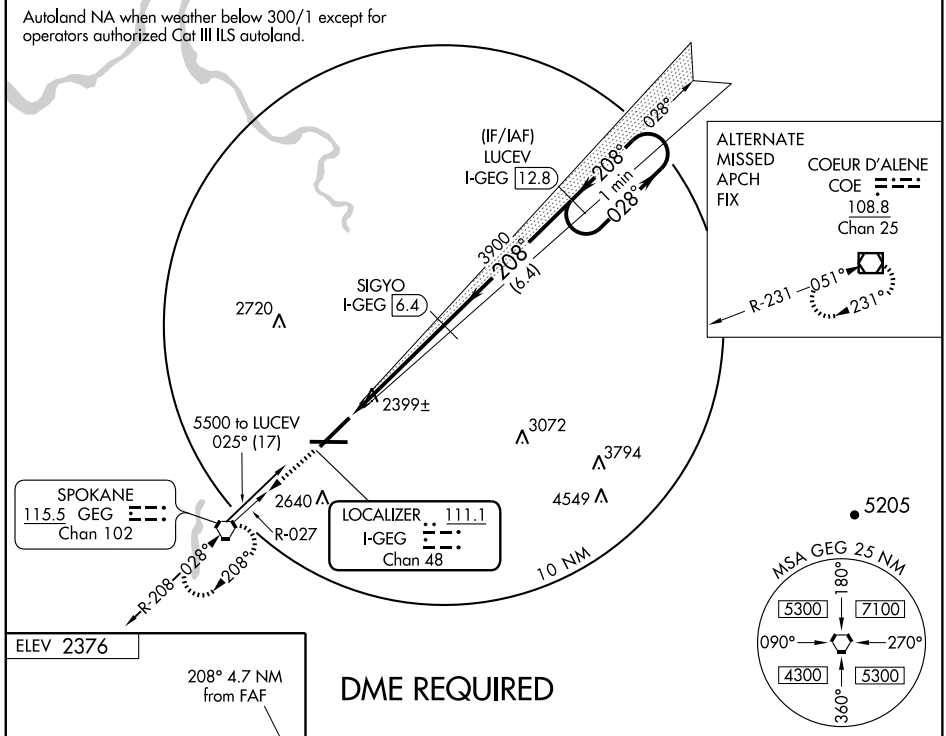
For inoperative ALSF, increase S-LOC 21 Cat D visiblity to 1.

ALSF-2

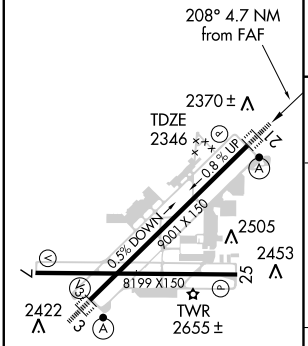
MISSED APPROACH: Climb to 4200 via GEG VORTAC R-027 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

Autoland NA when weather below 300/1 except for operators authorized Cat III ILS autoland.



ELEV 2376



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

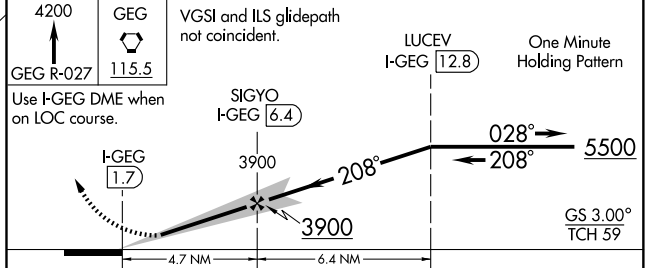
DME REQUIRED

4200
GEG R-027

GEG
115.5

Use I-GEG DME when on LOC course.

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 21	2546/18 200 (200-½)			
S-LOC 21	2680/24 334 (400-½)			2680/40 334 (400-¾)
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2980-2 604 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-OLJ	APP CRS	Rwy Idg	9001
111.1	027°	TDZE	2371
Chan 48		Apt Elev	2376

ILS or LOC RWY 3

SPOKANE INTL (GEG)

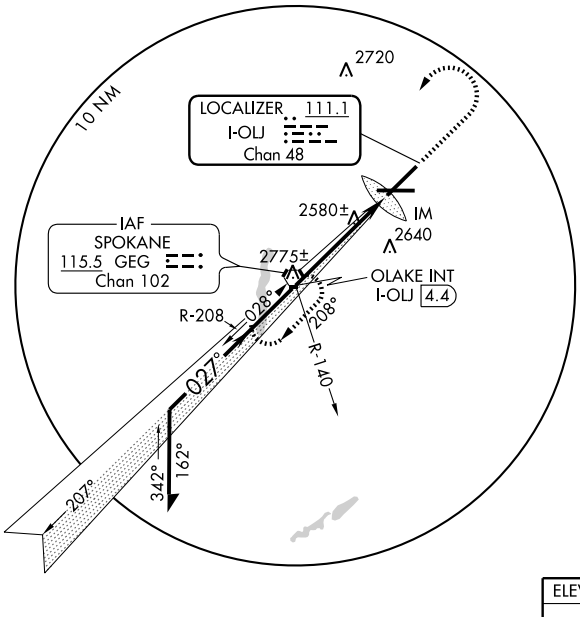
ALSF-2

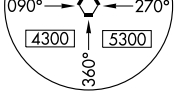
MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

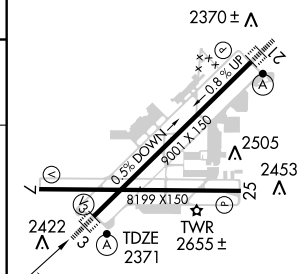
ALTERNATE MISSED APCH FIX: COEUR D'ALENE COE 108.8 Chan 25

R-231 051° 231°

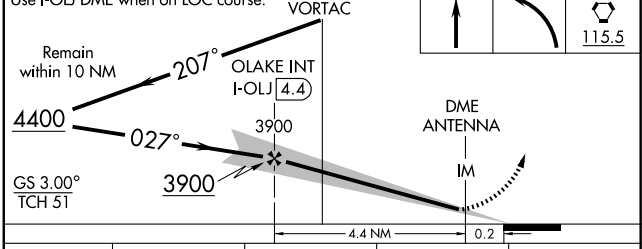




ELEV 2376



VGSI and ILS glidepath not coincident.
Use I-OLJ DME when on LOC course.



2900	4200	GEG
		115.5

CATEGORY	A	B	C	D
S-ILS 3	2571/18 200 (200-½)			
S-LOC 3	2880/24 509 (600-½)		2880/50 509 (600-1)	
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2980-2 604 (700-2)

027° 4.6 NM from FAF

TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

NW-1, 14 JAN 2010 to 11 FEB 2010

SPOKANE, WASHINGTON

AL-403 (FAA)

LOC/DME I-OLJ	APP CRS	Rwy Idg	9001
111.1	027°	TDZE	2371
Chan 48		Apt Elev	2376

ILS RWY 3 (CAT II)

SPOKANE INTL (GEG)

ALSF-2

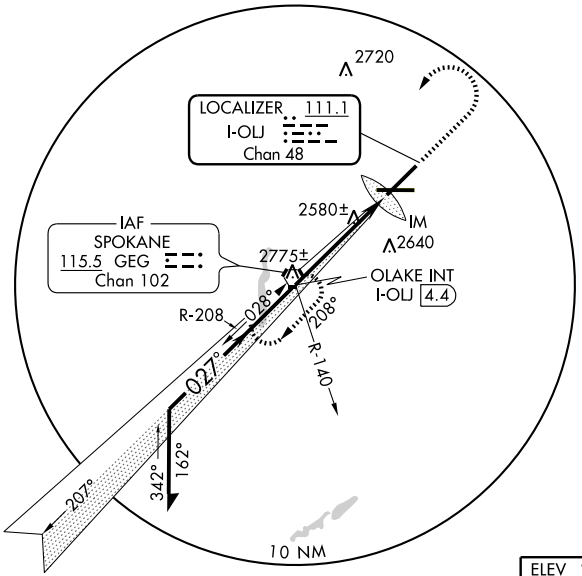
MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

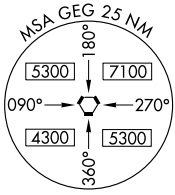
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

ALTERNATE MISSED APCH FIX

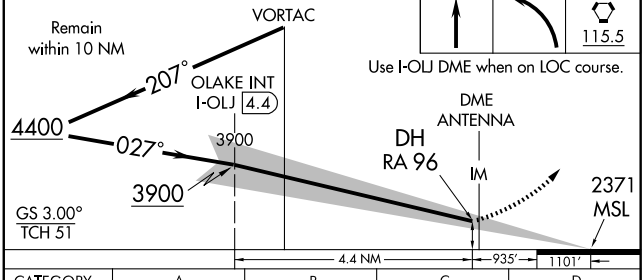
COEUR D'ALENE COE 108.8 Chan 25

R-231 051° 231°





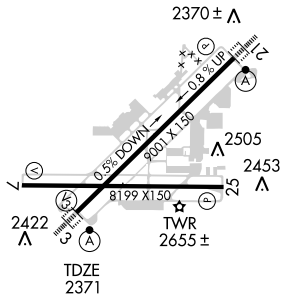
VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 3	RA 96/12 100 DA 2471			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 2376



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

NW-1, 14 JAN 2010 to 11 FEB 2010

SPOKANE, WASHINGTON

AL-403 (FAA)

LOC/DME I-OLJ	APP CRS	Rwy Idg	9001
111.1	027°	TDZE	2371
Chan 48		Apt Elev	2376

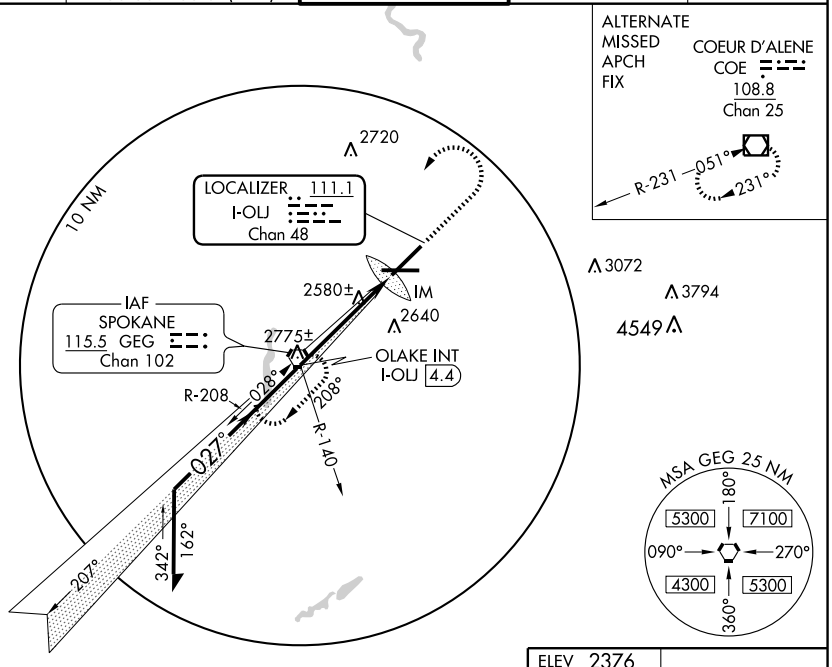
ILS RWY 3 (CAT III)

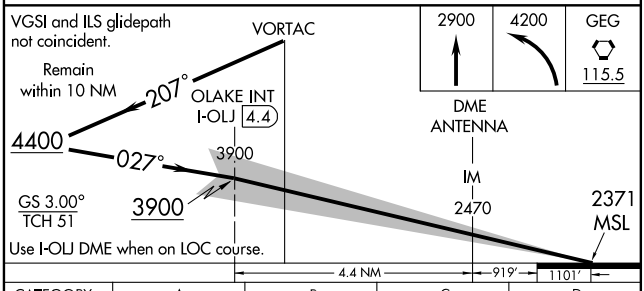
SPOKANE INTL (GEG)

ALSF-2

MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

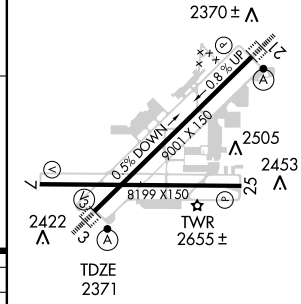
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55





CATEGORY	A	B	C	D
S-ILS 3	CAT IIIa RVR 700			
S-ILS 3	CAT IIIb RVR 600			
S-ILS 3	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwys 3-21
MIRL Rwys 7-25

NW-1, 14 JAN 2010 to 11 FEB 2010

SPOKANE, WASHINGTON

AL-403 (FAA)

LOC/DME I-GEG	APP CRS	Rwy Idg	9001
111.1	208°	TDZE	2346
Chan 48		Apt Elev	2376

ILS RWY 21 (CAT II)

SPOKANE INTL (GEG)

ALSF-2

MISSED APPROACH: Climb to 4200 via GEG VORTAC R-027 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

Autoland NA when weather below 300/1 except for operators authorized Cat III ILS autoland.

(IF/IAF)
LUCEV
I-GEG 12.8

208°
1 min
028°

028°
208°
3900
(6.4)

SIGYO
I-GEG 6.4

ALTERNATE MISSED APCH FIX
COEUR D'ALENE
COE
108.8
Chan 25
R-231
051°
231°

2720

2399±

5500 to LUCEV
025° (17)

3072

3794

2640

4549

SPOKANE
115.5 GEG
Chan 102

R-027

LOCALIZER 111.1
I-GEG
Chan 48

5205

10 NM

R-208
028°
208°

MSA GEG 25 NM
180°
5300
7100
090°
270°
4300
5300
360°

ELEV 2376

TDZE
2346

2370 ±

0.8% UP

0.5% DOWN

9001 X 150

8199 X150

2505

2453

2422

TWR
2655 ±

TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

DME REQUIRED

4200	GEG
GEG R-027	115.5

Use I-GEG DME when on LOC course.

VGSI and ILS glidepath not coincident.

LUCEV
I-GEG 12.8

One Minute Holding Pattern

SIGYO
I-GEG 6.4

DH
RA 147

3900

208°

028°
208°
5500

2346
MSL

3900

GS 3.00°
TCH 59

941′ | 947′ | 4.5 NM | 6.4 NM

CATEGORY	A	B	C	D
S-ILS 21	RA 147/16 100 DA 2446			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

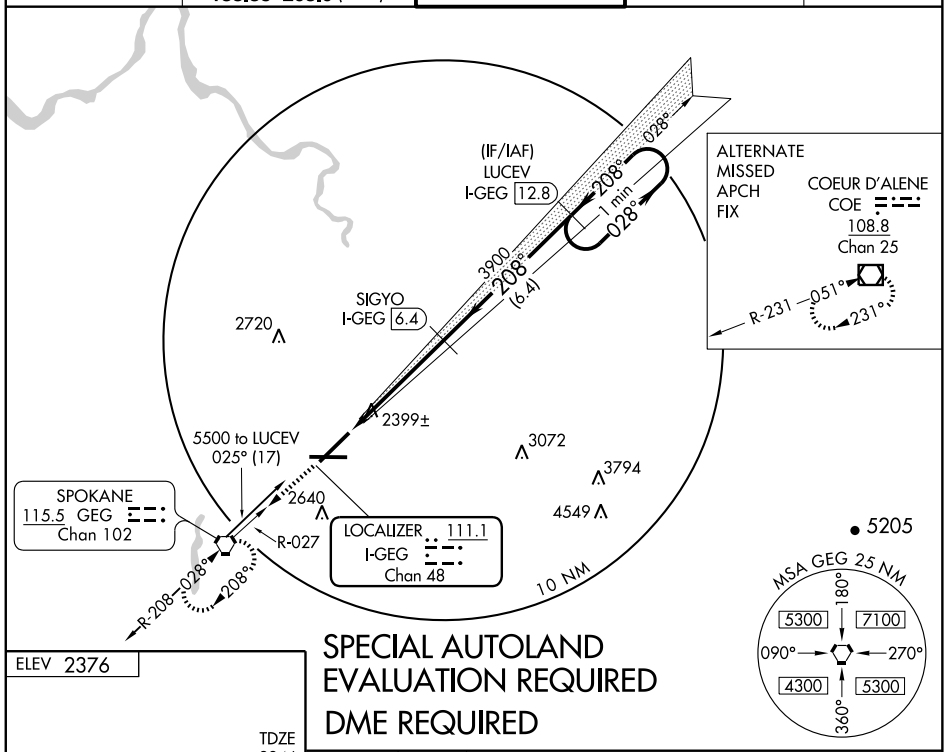
LOC/DME I-GEG	APP CRS	Rwy Idg	9001
111.1	208°	TDZE	2346
Chan 48		Apt Elev	2376

ILS RWY 21 (CAT III)
SPOKANE INTL (GEG)

ALSF-2

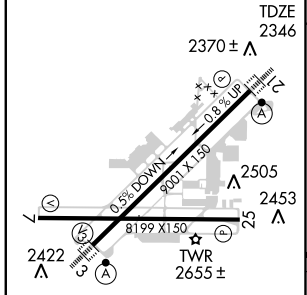
MISSED APPROACH: Climb to 4200 via GEG VORTAC R-027 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55



SPECIAL AUTOLAND EVALUATION REQUIRED
DME REQUIRED

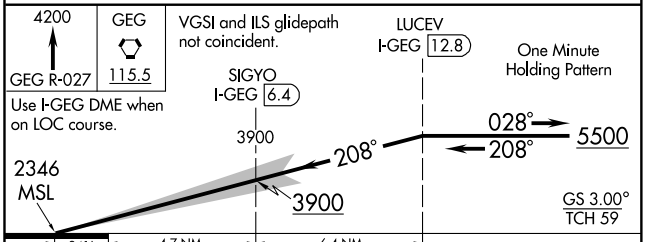
ELEV 2376



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

4200
GEG R-027
GEG
115.5
Use I-GEG DME when on LOC course.

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 21		CAT IIIa	RVR 07	
S-ILS 21		CAT IIIb	RVR 06	
S-ILS 21		CAT IIIc	NA	

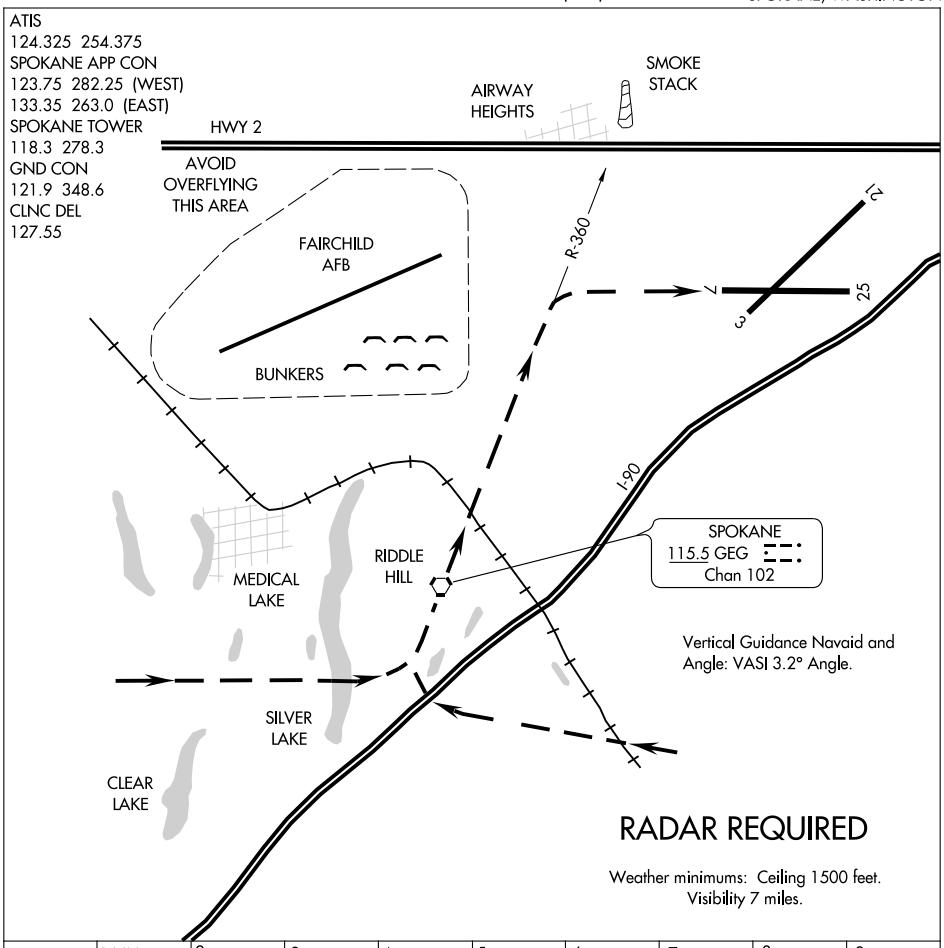
CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 14 JAN 2010 to 11 FEB 2010

RIDDLE HILL VISUAL RWY 7

AL-403 (FAA)

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON



RIDDLE HILL VISUAL APPROACH RWY 7

PROCEDURE NOT AUTHORIZED AT NIGHT.

APP CRS	Rwy Idg	9001
027°	TDZE	2371
	Apt Elev	2376

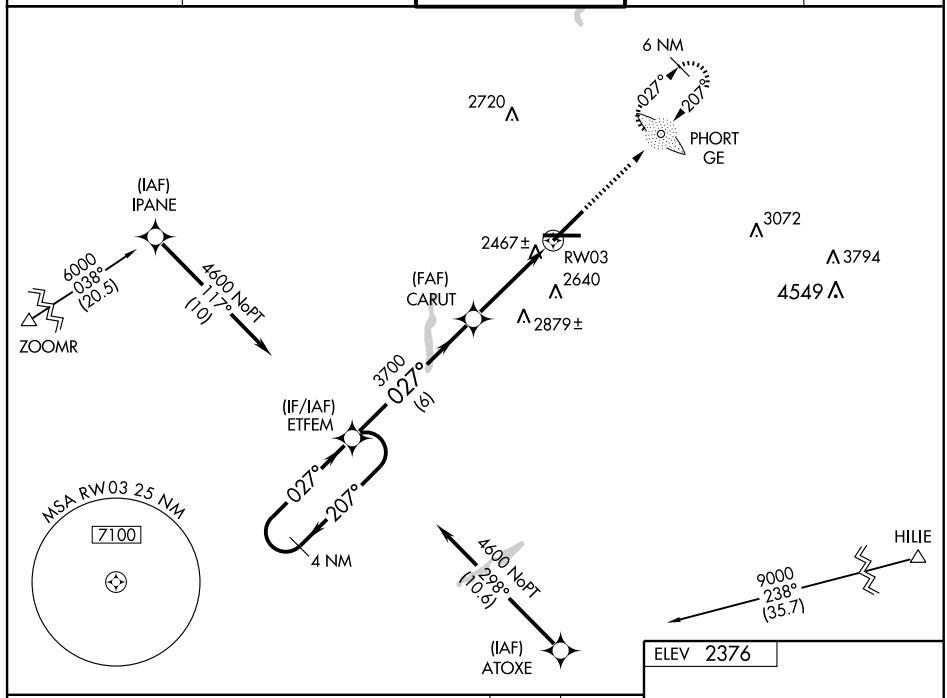
RNAV (GPS) RWY 3
SPOKANE INTL (GEG)

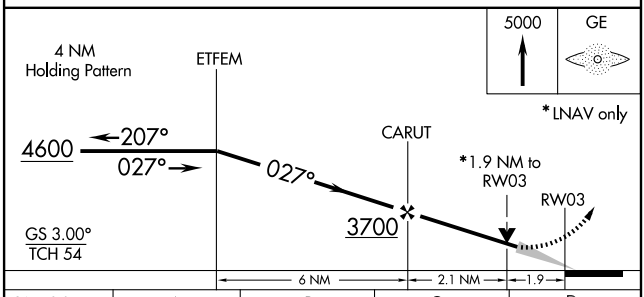
DME/DME RNP- 0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 43°C (110°F).

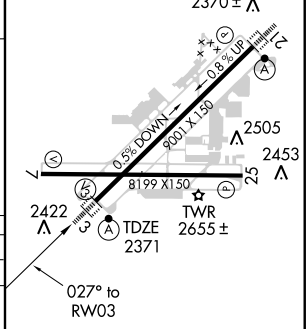
ALSF-2

MISSED APPROACH: Climb to 5000 direct PHORT LOM and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	2979-2 608 (700-2)			
LNAV MDA	3020/24 649 (700-½)		3020/60 649 (700-1¼)	3020-1½ 649 (700-1½)
CIRCLING	3020-1 644 (700-1)		3020-1¾ 644 (700-1¾)	3020-2 644 (700-2)

TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	8199
CH 48801	072°	TDZE	2376
W07A		Apt Elev	2376

RNAV (GPS) RWY 7

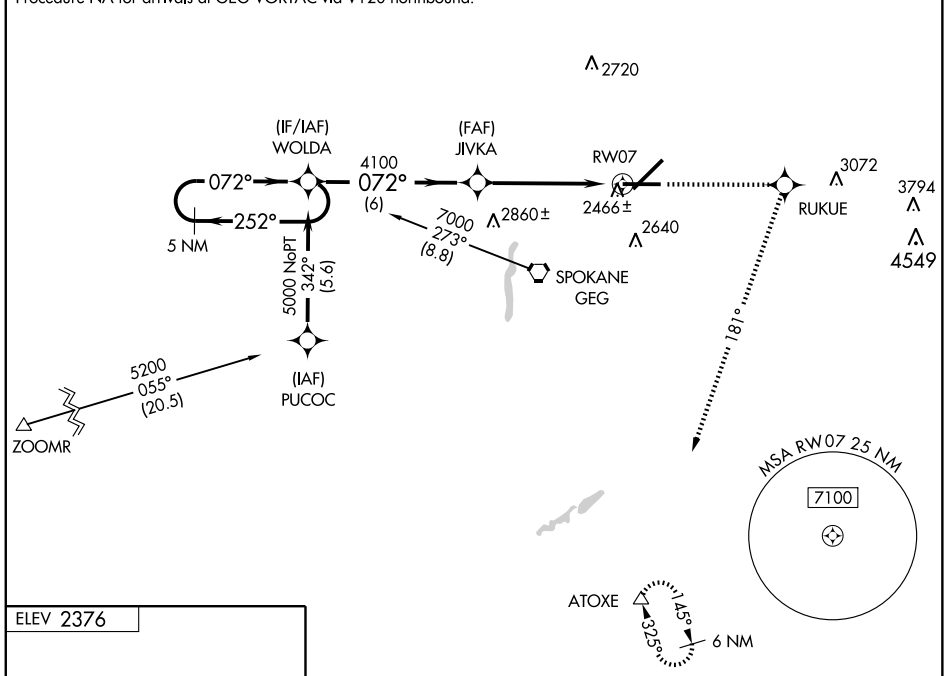
SPOKANE INTL (GEG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

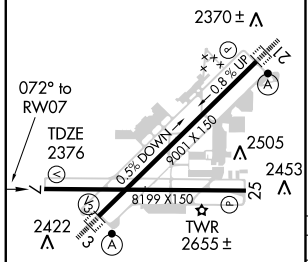
MISSED APPROACH: Climb to 6000 direct RUKUE and via 181° track to ATOXE and hold, continue climb-in-hold to 6000.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

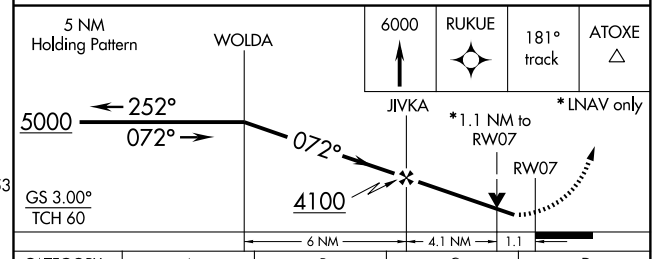
Procedure NA for arrivals at GEG VORTAC via V120 northbound.



ELEV 2376



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25



CATEGORY	A	B	C	D
LPV DA	2626-1 250 (300-1)			
LNAV/VNAV DA	2786-1½ 410 (500-1½)			
LNAV MDA	2800-1 424 (500-1)		2800-1¼ 424 (500-1¼)	
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2980-2 604 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

SPOKANE, WASHINGTON

APP CRS	Rwy Idg	9001
208°	TDZE	2346
	Apt Elev	2376

RNAV (GPS) RWY 21

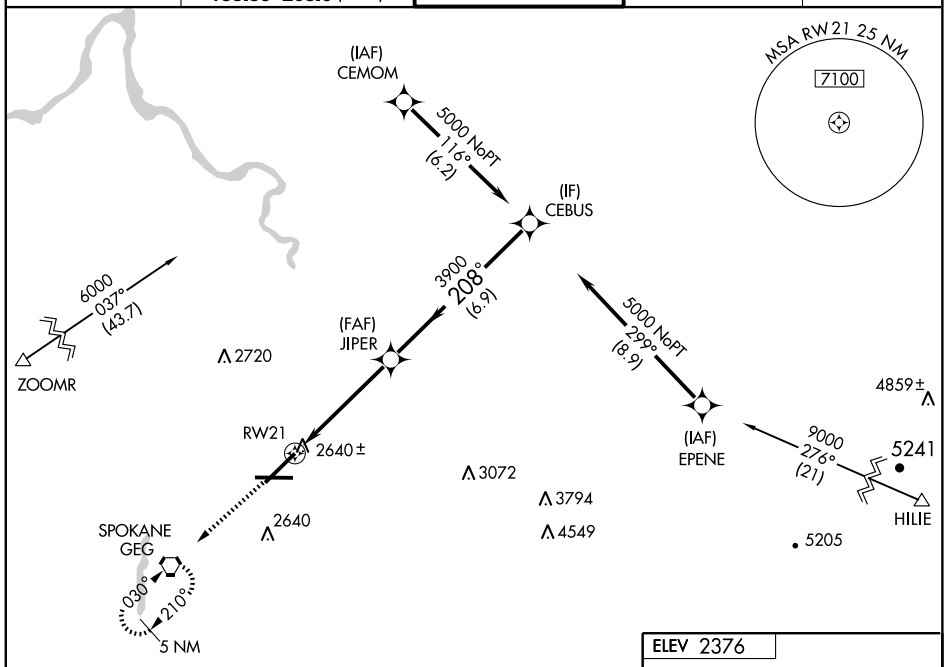
SPOKANE INTL (GEG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). DME/DME RNP-0.3 NA.

ALSF-2

MISSED APPROACH: Climb to 4200 direct GEG VORTAC and hold.

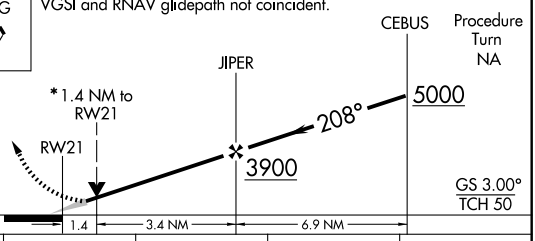
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

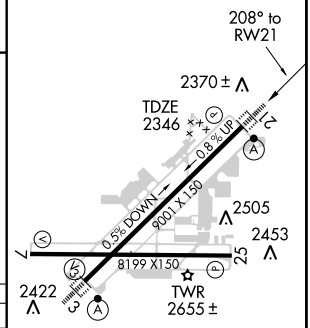


4200 | GEG

VGSI and RNAV glidepath not coincident.

*LNAV only





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	2720/50 374 (400-1)			2720/50 374 (400-1)
LNAV MDA	2800/24 454 (500-½)		2800/40 454 (500-¾)	2800/50 454 (500-1)
CIRCLING	2960-1 584 (600-1)	2960-1 584 (600-1)	2960-1½ 584 (600-1½)	2980-2 604 (700-2)

TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 93501 W25A	APP CRS 253°	Rwy Idg 8199 TDZE 2372 Apt Elev 2376

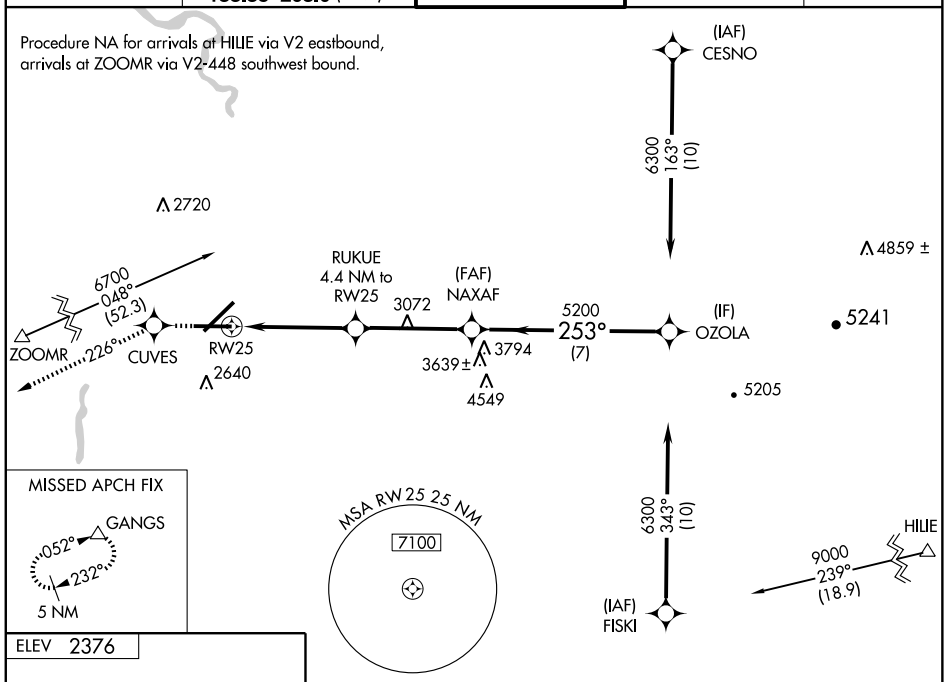
RNAV (GPS) RWY 25
SPOKANE INTL (GEG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F).
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

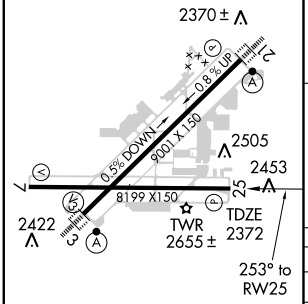
MISSED APPROACH: Climb to 5000 direct CUVES and via 226° track to GANGS and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55

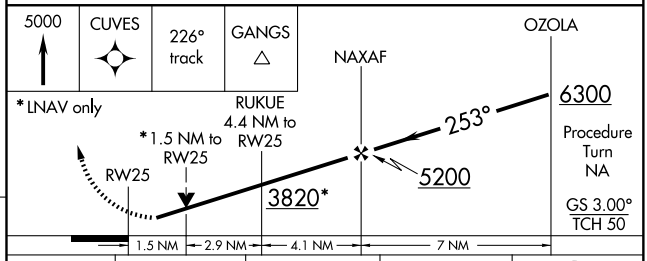
Procedure NA for arrivals at HILIE via V2 eastbound, arrivals at ZOOMR via V2-448 southwest bound.



ELEV 2376



TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25



CATEGORY	A	B	C	D
LPV DA	2704-1¼ 332 (400-1¼)			
LNAV/VNAV DA	2782-1½ 410 (500-1½)			
LNAV MDA	2900-1 528 (600-1)		2900-1½ 528 (600-1½)	2900-1¾ 528 (600-1¾)
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2980-2 604 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

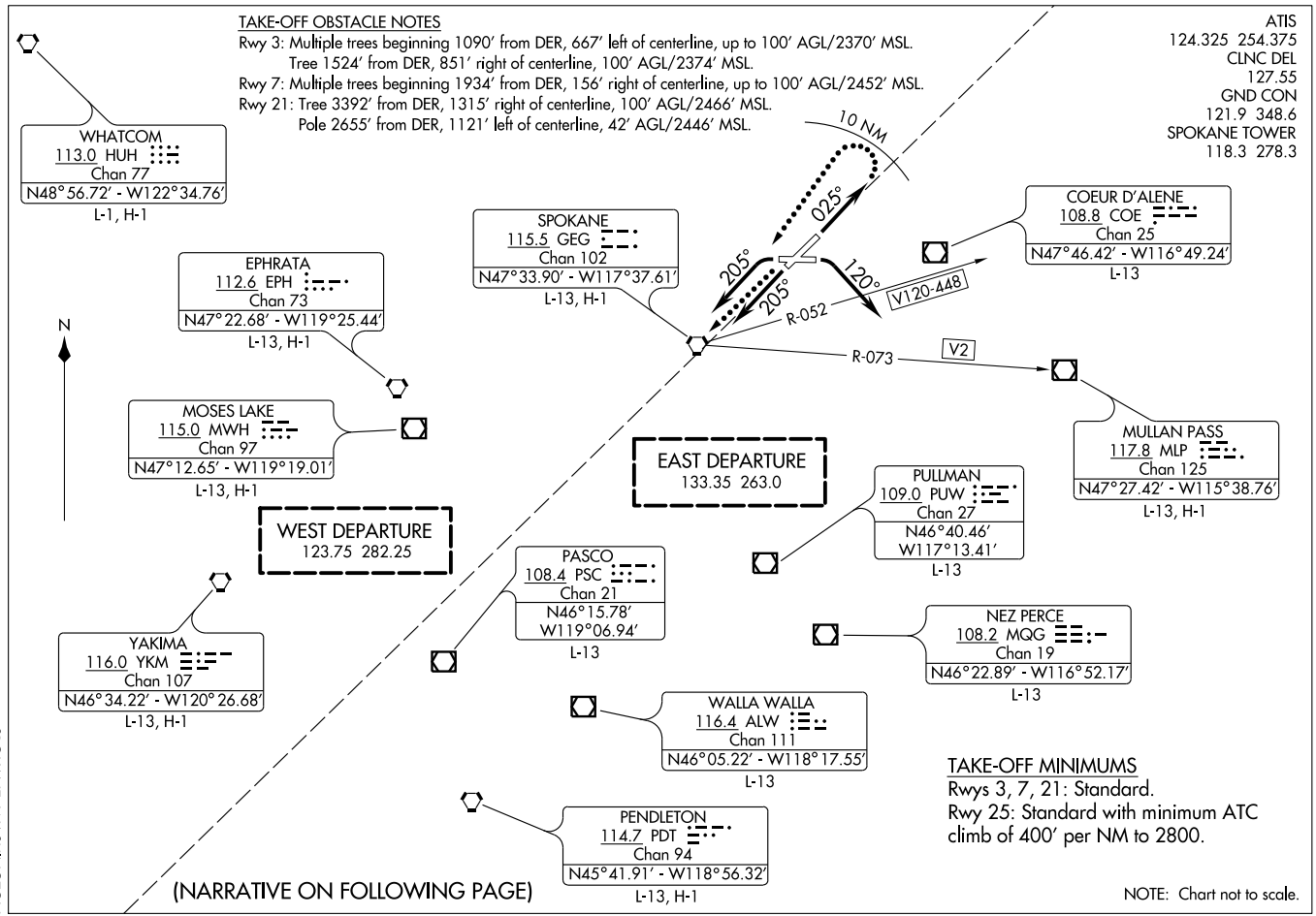
SPOKANE EIGHT DEPARTURE

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

TAKE-OFF OBSTACLE NOTES

Rwy 3: Multiple trees beginning 1090′ from DER, 667′ left of centerline, up to 100′ AGL/2370′ MSL.
Tree 1524′ from DER, 851′ right of centerline, 100′ AGL/2374′ MSL.
Rwy 7: Multiple trees beginning 1934′ from DER, 156′ right of centerline, up to 100′ AGL/2452′ MSL.
Rwy 21: Tree 3392′ from DER, 1315′ right of centerline, 100′ AGL/2466′ MSL.
Pole 2655′ from DER, 1121′ left of centerline, 42′ AGL/2446′ MSL.

ATIS
124.325 254.375
CLNC DEL
127.55
GND CON
121.9 348.6
SPOKANE TOWER
118.3 278.3



TAKE-OFF MINIMUMS

Rwys 3, 7, 21: Standard.
Rwy 25: Standard with minimum ATC climb of 400′ per NM to 2800.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SPOKANE EIGHT DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Turn left heading 025°, expect radar vectors to assigned airway/route. Thence....
TAKE-OFF RUNWAY 7: Turn right heading 120°, expect radar vectors to assigned airway/route. Thence....
TAKE-OFF RUNWAY 21: Turn left heading 205°, expect radar vectors to assigned airway/route. Thence....
TAKE-OFF RUNWAY 25: Turn left heading 205°, expect radar vectors to assigned airway/route. Thence....

....maintain 12000′ or assigned lower altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: Climb direct GEG VORTAC before proceeding on course. Cross GEG VORTAC at or above: NE-bound V120-448 3900′; E-bound V2 4200′. Aircraft departing RWY 3, if not in contact with ATC within 10 NM after takeoff, turn left direct GEG VORTAC, cross GEG VORTAC at or above 4200′, thence via assigned fix/route.

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC GEG 115.5 Chan 102	APP CRS 028°	Rwy Idg 9001 TDZE 2371 Apt Elev 2376

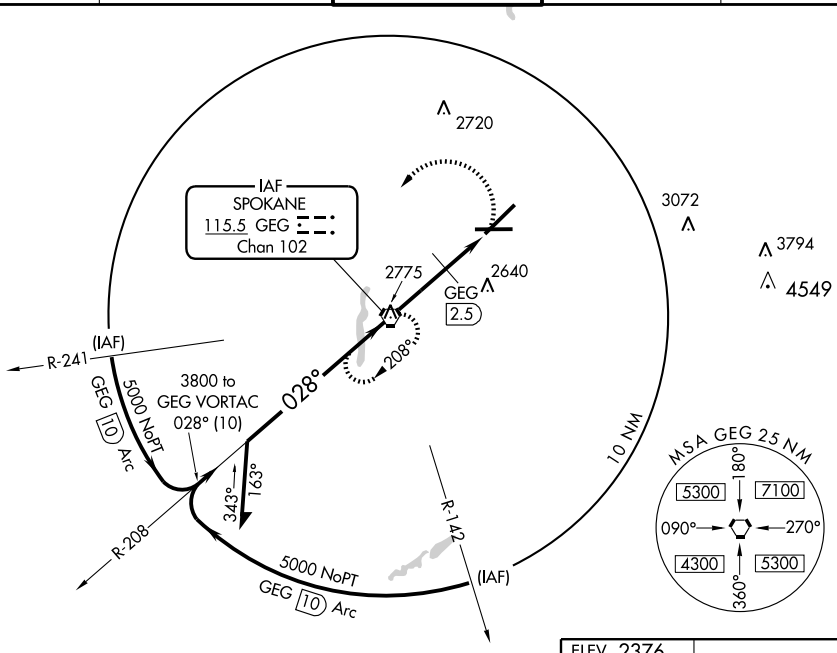
VOR RWY 3
SPOKANE INTL (GEG)

Circling Southeast of Rwy 3-21 not authorized Category E.

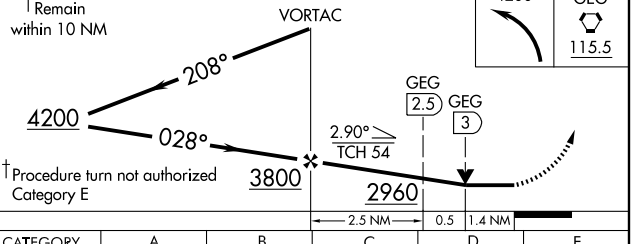
ALSF-2

MISSED APPROACH: Climbing left turn to 4200 direct to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (WEST) 133.35 263.0 (EAST)	118.3 278.3	121.9 348.6	127.55



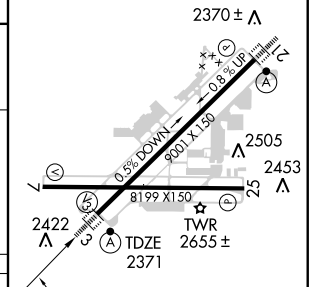
†Remain within 10 NM



†Procedure turn not authorized Category E

CATEGORY	A	B	C	D	E
S-3	2960/24 589 (600-½)		2960/50 589 (600-1)	2960/60 589 (600-1¼)	
CIRCLING	2960-1 584 (600-1)		2960-1½ 584 (600-1½)	2960-2 584 (600-2)	3080-2½ 704 (800-2½)
DME MINIMA					
S-3	2880/24 509 (600-½)		2880/50 509 (600-1)	2880/60 509 (600-1¼)	

ELEV 2376



028° 4.4 NM from FAF

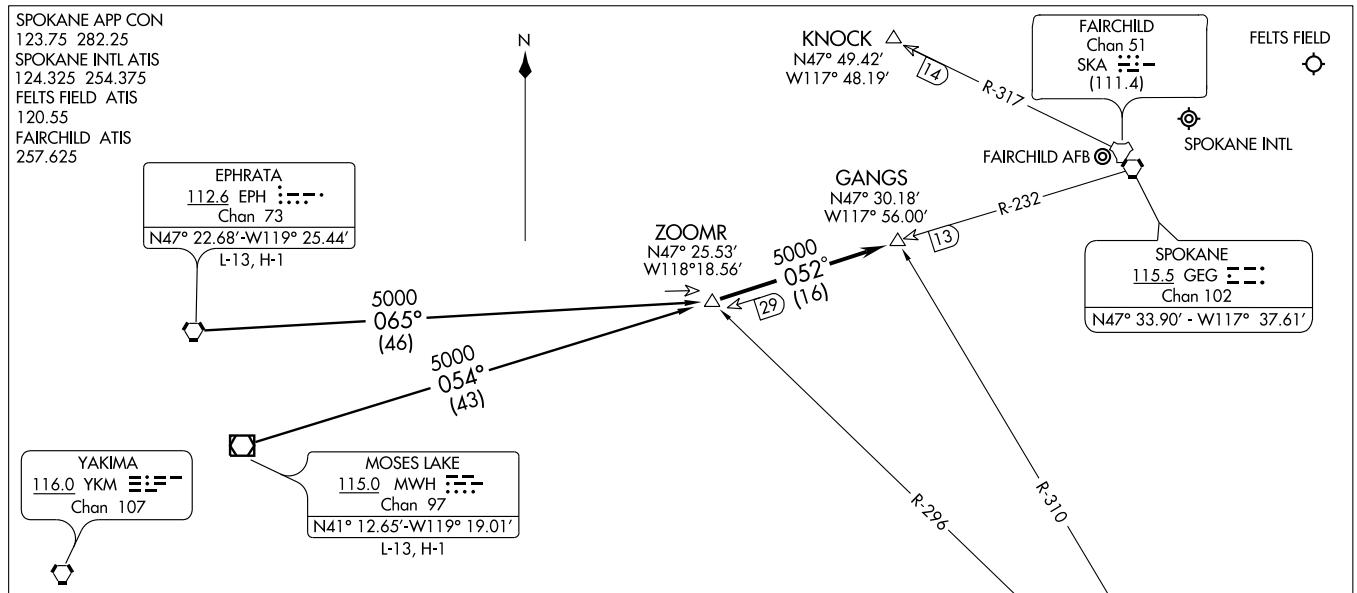
TDZ/CL Rwys 3 and 21
REIL Rwys 7 and 25
HIRL Rwy 3-21
MIRL Rwy 7-25

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NW-1, 14 JAN 2010 to 11 FEB 2010

ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON



EPHRATA TRANSITION (EPH.ZOOMR1): From over EPH VORTAC via EPH R-065 to ZOOMR INT. Thence. . . .

MOSES LAKE TRANSITION (MWH.ZOOMR1): From over MWH VOR/DME via MWH R-054 to ZOOMR INT. Thence. . . .

. . . . From over ZOOMR INT via GEG R-232 to GANGS INT. Expect radar vectors to final approach course.

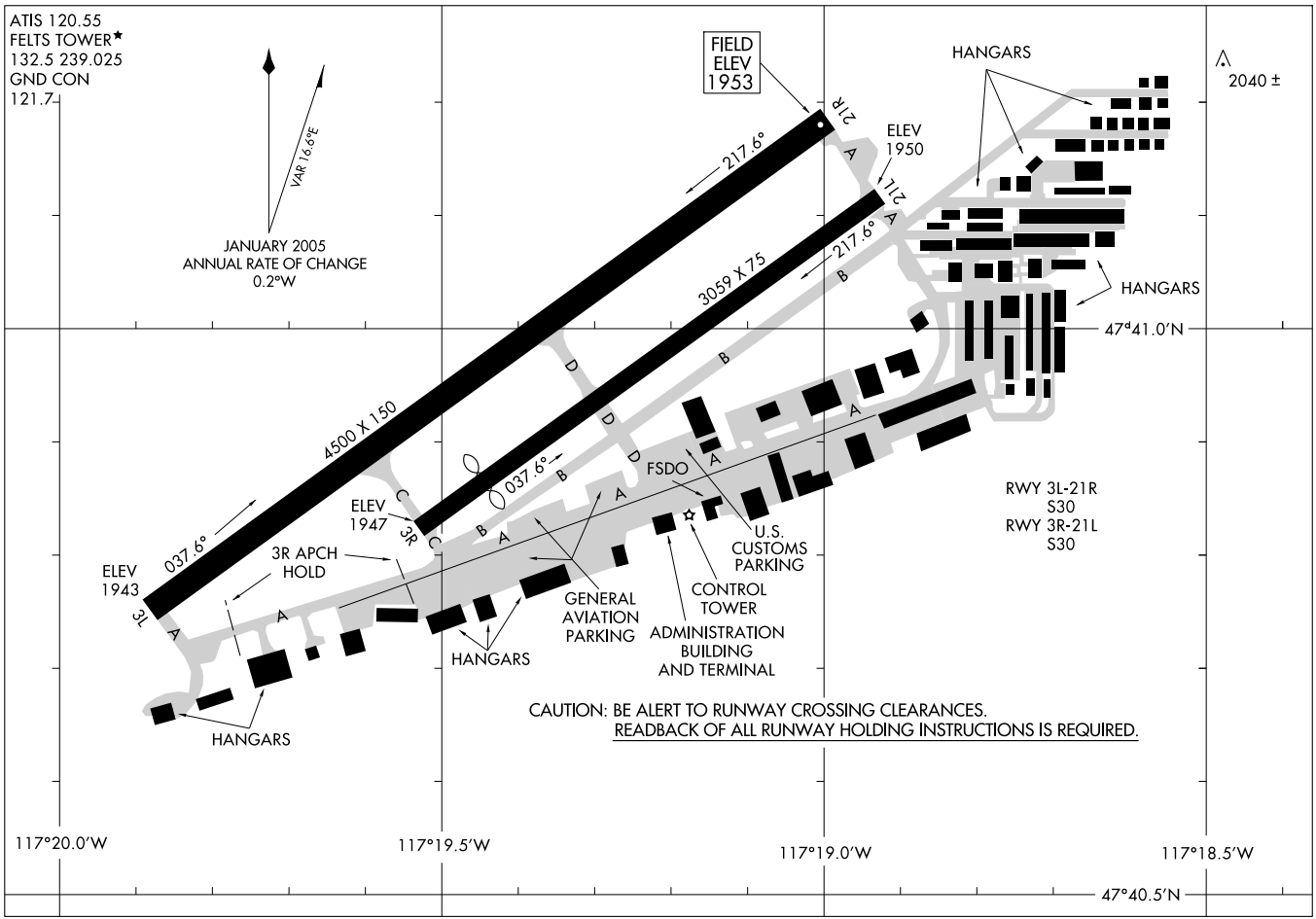
LOST COMMUNICATIONS: After GANGS INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-232, maintain last assigned altitude to GEG.

Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

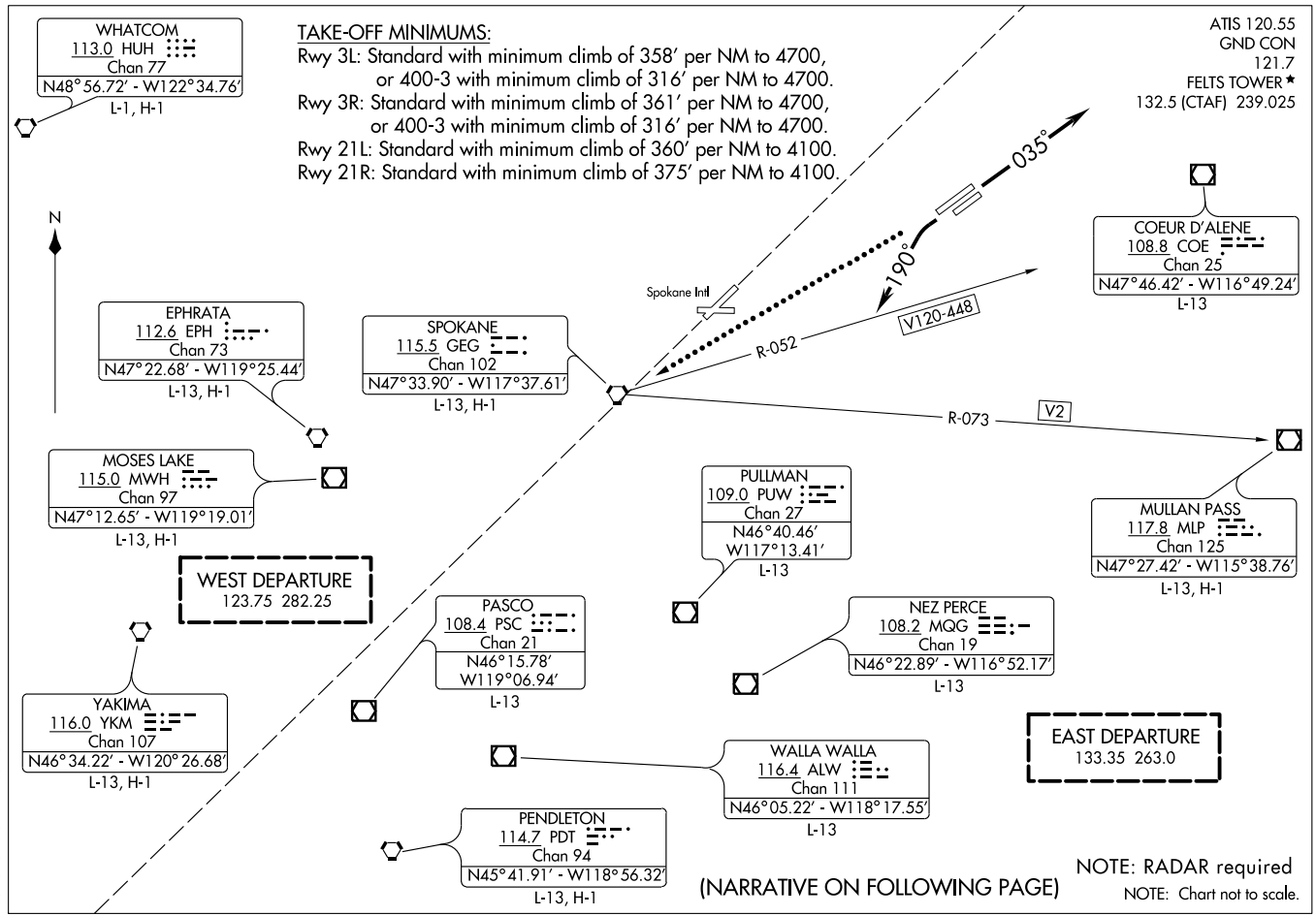
NOTE: Chart not to scale.



AIRPORT DIAGRAM

AL-402 (FAA)

SPOKANE/FELTS FIELD (SFF)
SPOKANE, WASHINGTON



FELTS ONE DEPARTURE

(SFF.SFF) 08157

SL-402 (FAA)

SPOKANE/FELTS FIELD (SFF)
SPOKANE, WASHINGTON

FELTS ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3L/R: Climb heading 035°, expect radar vectors to assigned airway/route. Thence....
TAKE-OFF RUNWAY 21L/R: Turn left heading 190°, expect radar vectors to assigned airway/route. Thence....
....maintain 12000′ or assigned lower altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: Climb direct GEG VORTAC before proceeding on course. Cross GEG VORTAC at or above: NE-bound V120-448 3900′; E-bound V2 4200′.

TAKE-OFF OBSTACLE NOTES

Rwy 3L: Multiple trees beginning 5000′ from DER, 530′ left of centerline, up to 100′ AGL/2295′ MSL.
Multiple trees beginning 1854′ from DER, 773′ right of centerline, up to 100′ AGL/2037′ MSL.

Rwy 3R: Multiple trees beginning 5016′ from DER, 1033′ left of centerline, up to 100′ AGL/2295′ MSL.
Multiple trees beginning 1870′ from DER, 271′ right of centerline, up to 100′ AGL/2037′ MSL.
Hangar 92′ from DER, 341′ right of centerline, 35′ AGL/1967′ MSL.
NDB 925′ from DER, 270′ right of centerline, 10′ AGL/1987′ MSL.

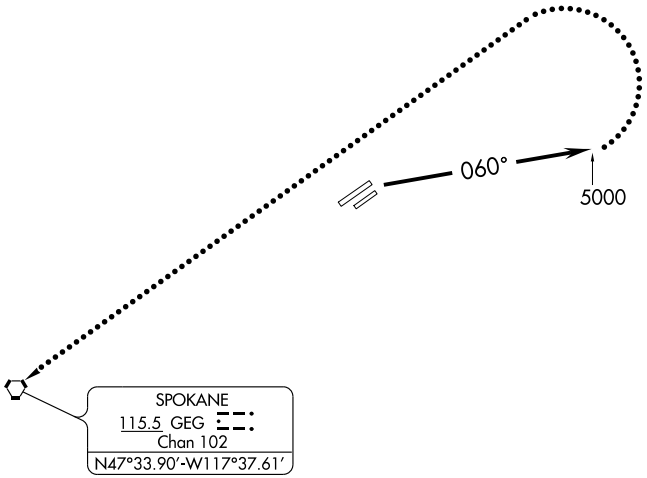
Rwy 21L: Multiple trees beginning 926′ from DER, 184′ left of centerline, up to 100′ AGL/2006′ MSL.
Multiple bldgs and OL on bldg 316′ from DER, 110′ left of centerline, up to 35′ AGL/1992′ MSL.
Elevator 4080′ from DER, 598′ left of centerline, 50′ AGL/2080′ MSL.

Rwy 21R: Multiple trees beginning 189′ from DER, 404′ right of centerline, up to 100′ AGL/1979′ MSL.
Multiple OL on bldgs and hangars 204′ from DER, 230′ left of centerline, up to 35′ AGL/1973′ MSL.
Elevator 2655′ from DER, 1097′ left of centerline, 50′ AGL/2080′ MSL.
Multiple poles and OL on poles 659′ from DER, 2′ left of centerline, up to 42′ AGL/1982′ MSL.
Multiple poles and OL on poles 1252′ from DER, 13′ right of centerline, up to 42′ AGL/1982′ MSL.

NW-1, 14 JAN 2010 to 11 FEB 2010

HAYDEN ONE DEPARTURE

ATIS 120.55
GND CON
121.7
FELTS TOWER ★
132.5 (CTAF) 239.025
SPOKANE DEP CON
133.35 263.0



NOTE: This SID requires a minimum climbof 340′ per NM to 5000′ (850FPM/150K or 1133FPM/200K), or, 2600′ ceiling and 2 miles visibility.

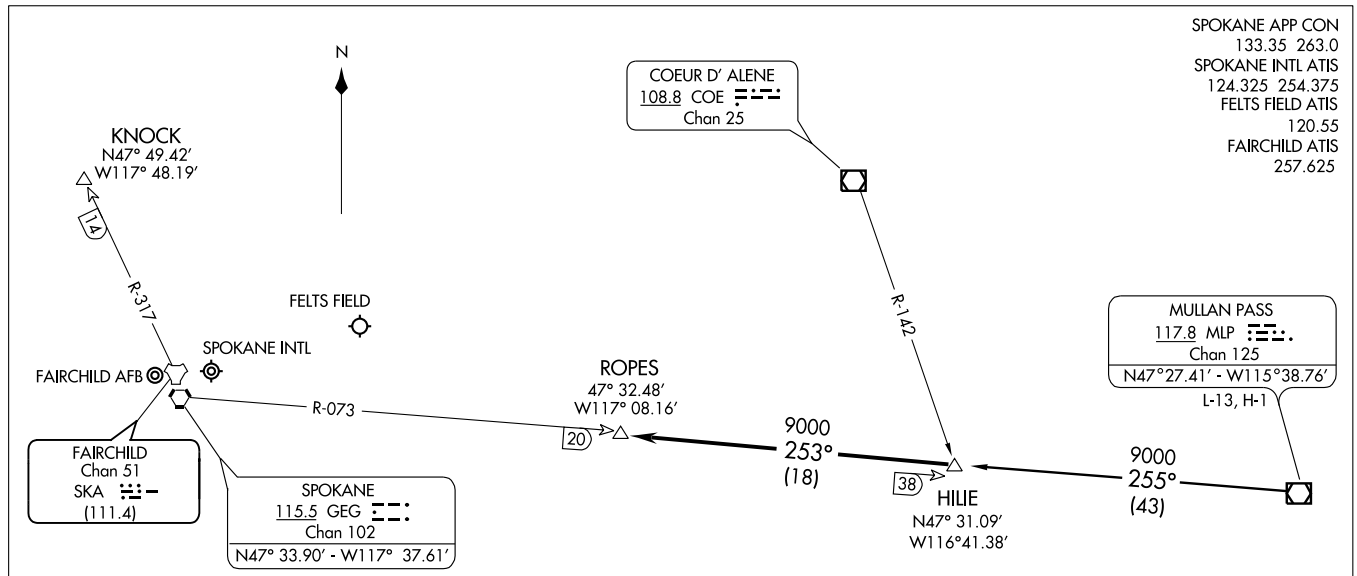
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 3L/R: Climb via heading 060° until reaching 5000′ for vector to (assigned route) or (fix).

LOST COMMUNICATIONS: If not in contact with departure control after leaving 3000′, continue climb to 5000′ turn left proceed direct to GEG VORTAC and thence on course.

HILIE ONE ARRIVAL (HILIE.HILIE1)



MULLAN PASS TRANSITION (MLP.HILIE1): From over MLP VOR/DME via MLP R-255 to HILIE INT. Thence. . . .

. . . .From over HILIE INT via GEG R-073 to ROPES INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES INT:
Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last altitude to GEG.
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

SPOKANE, WASHINGTON

AL-402 (FAA)

LOC/DME I-FLZ	APP CRS	Rwy Idg	4500
111.7	218°	TDZE	1953
Chan 54		Apt Elev	1953

ILS/DME RWY 21R

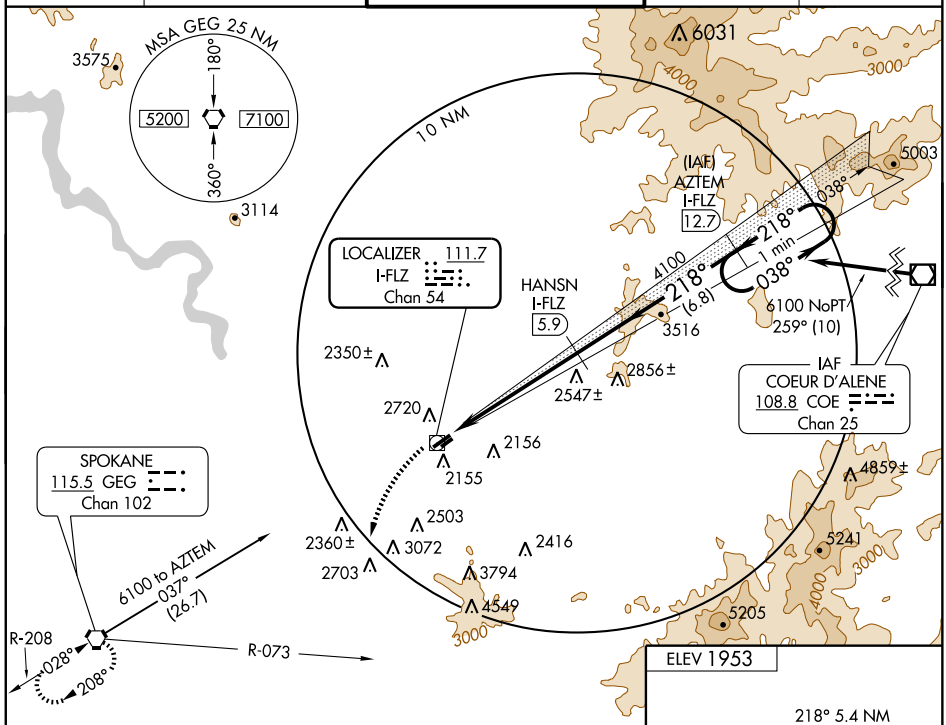
SPOKANE / FELTS FIELD (SFF)

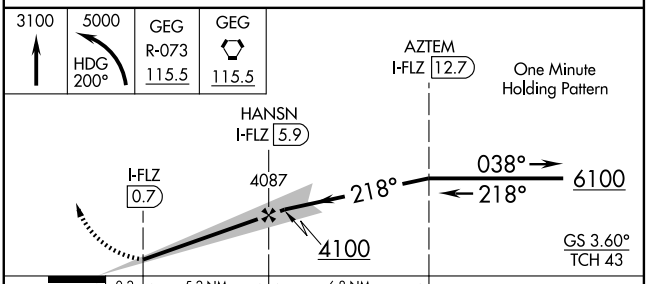
Circling not authorized northwest of Rwy 3L-21R.
Inoperative table does not apply.

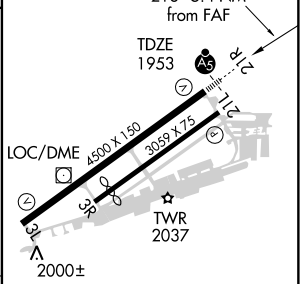
MALSR

MISSED APPROACH: Climb to 3100 then climbing left turn to 5000 via heading 200° and GEG R-073 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	FELTS TOWER ★	GND CON	UNICOM
120.55	133.35 263.0	132.5 (CTAF) 239.025	121.7	122.95







CATEGORY	A	B	C	D
S-ILS 21R	2223-¾ 270 (300-¾)			NA
S-LOC 21R	2860-1¼ 907 (1000-1¼)		2860-2¾ 907 (1000-2¾)	NA
CIRCLING	2860-1¼ 907 (1000-1¼)		2860-2¾ 907 (1000-2¾)	NA

REIL Rwy 3L
MIRL Rwy 3L-21R

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
251°	TDZE	N/A
	Apt Elev	1953

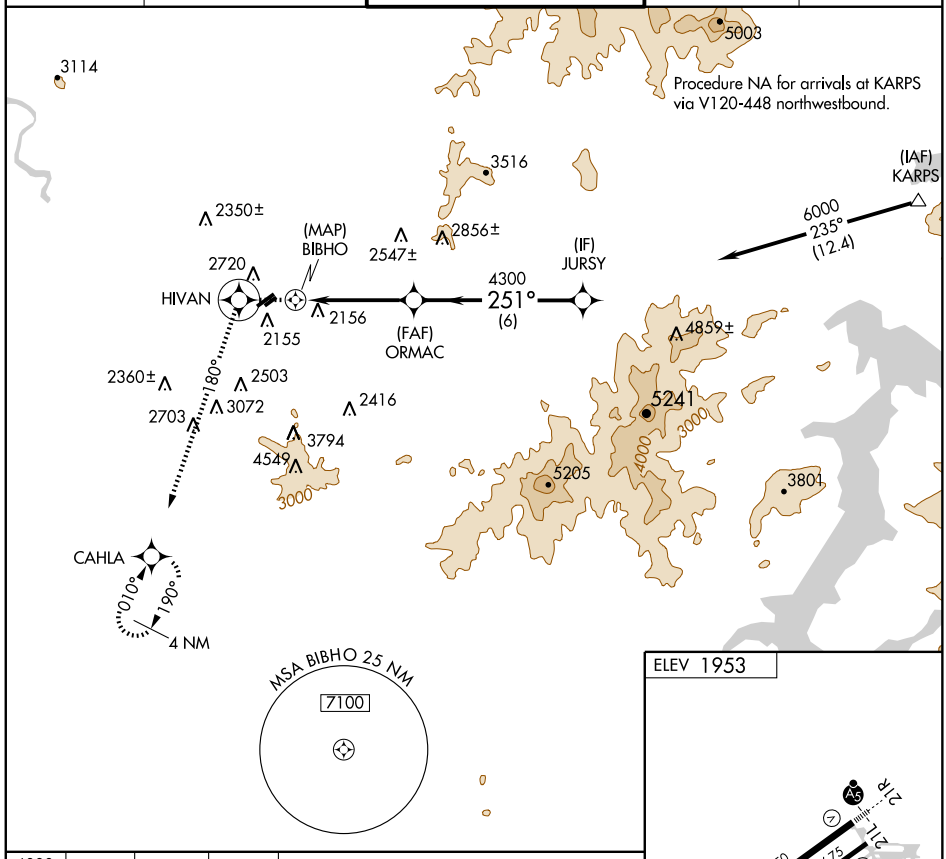
RNAV (GPS)-A

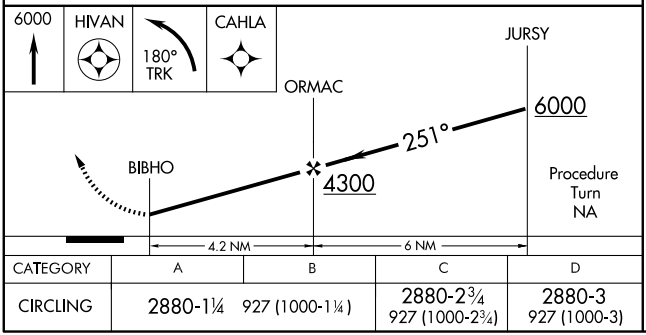
SPOKANE / FELTS FIELD (SFF)

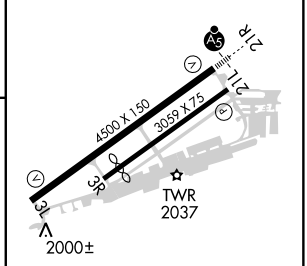
DME/DME RNP- 0.3 NA.
Circling NA northwest of Rwy 3L-21R.

MISSED APPROACH: Climb to 6000 direct HIVAN and left turn via 180° track to CAHLA and hold.

ATIS	SPOKANE APP CON	FELTS TOWER ★	GND CON	UNICOM
120.55	133.35 263.0	132.5 (CTAF) L 239.025	121.7	122.95







CATEGORY	A	B	C	D
CIRCLING	2880-1¼ 927 (1000-1¼)		2880-2¾ 927 (1000-2¾)	2880-3 927 (1000-3)

REIL Rwy 3L L
MIRL Rwy 3L-21R

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 3L

SPOKANE / FELTS FIELD (SFF)

APP CRS	Rwy Idg	4500
035°	TDZE	1945
	Apt Elev	1953

Circling NA northwest of Rwy 3L-21R.
Circling NA at night to Rwy 3R-21L.
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 7100 direct KIRRE and hold.

ATIS	SPOKANE APP CON	FELTS TOWER ★	GND CON	UNICOM
120.55	133.35 263.0	132.5 (CTAF) L 239.025	121.7	122.95

Procedure NA for arrivals at DIANN via V112 northbound.

DIANN

3114

5800 192° (37.2)

MSA GENEY 25 NM

7100

6 NM 035° 215°

KIRRE

3516

2350±

2856±

2547±

2720

(MAP) GENEY

2156

2155

(IAF) ZOPEL

4600 125° (5)

(FAF) ALAYE

2360± 2503

3072 2416

2703 3794

4549

3900 035° (6)

5205

3000

(IF) CEBTA

6800 240° (15)

ROPES

Procedure NA for arrivals at ROPES via V2 eastbound.

(IAF) ETFEM

4600 038° (7.2)

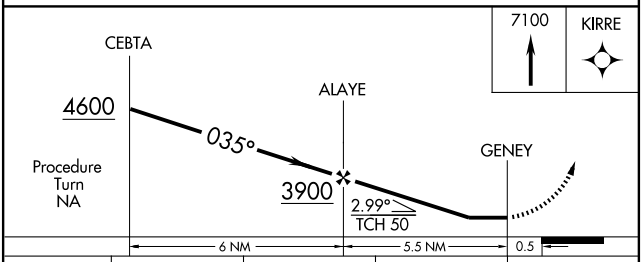
4600 305° (5)

(IAF) ODOCE

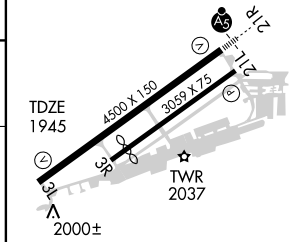
4800 021° (18.1)

GRAPH

Procedure NA for arrivals at GRAPH via V204 southwest bound.



ELEV 1953



CATEGORY	A	B	C	D
LNAV MDA	2880-1¼	935 (1000-1¼)	2880-2¾ 935 (1000-2¾)	2880-3 935 (1000-3)
CIRCLING	2880-1¼	927 (1000-1¼)	2880-2¾ 927 (1000-2¾)	2880-3 927 (1000-3)

REIL Rwy 3L L
MIRL Rwy 3L-21R

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC GEG	APP CRS	Rwy Idg	4500
115.5	039°	TDZE	1945
Chan 102		Apt Elev	1953

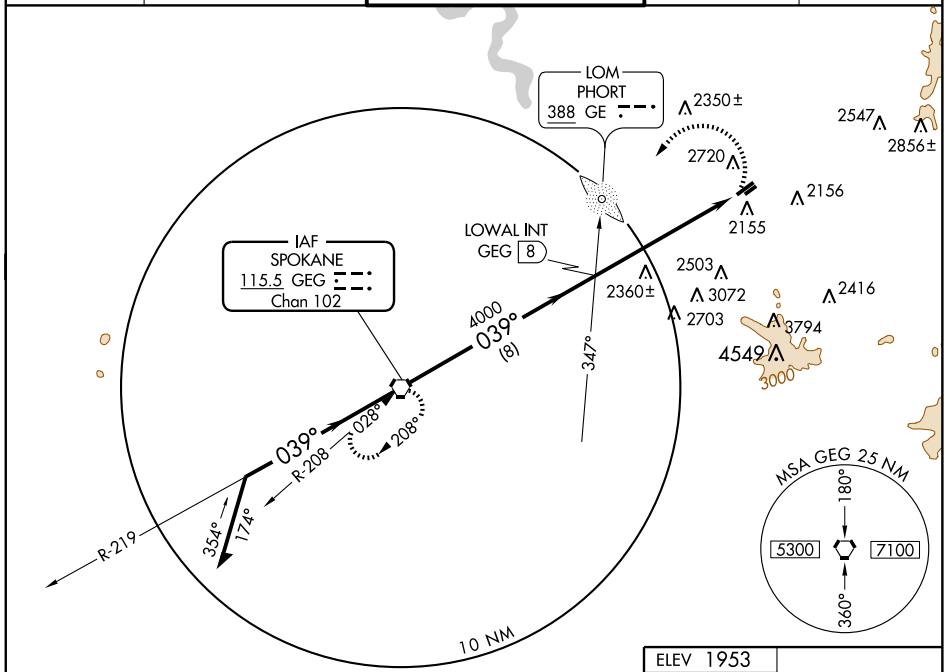
VOR RWY 3L

SPOKANE / FELTS FIELD (SFF)

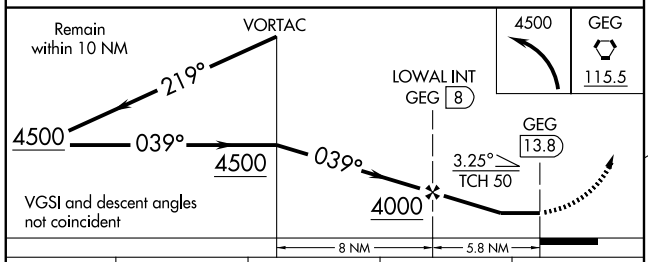
Circling not authorized northwest of Rwy 3L-21R.

MISSED APPROACH: Climbing left turn to 4500 direct GEG VORTAC and hold.

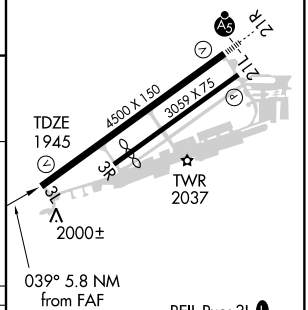
ATIS	SPOKANE APP CON	FELTS TOWER ★	GND CON	UNICOM
120.55	133.35 263.0	132.5 (CTAF) L 239.025	121.7	122.95



ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-3L	2920-1¼ 975 (1000-1¼)	2920-1½ 975 (1000-1½)	2920-3 975 (1000-3)	
CIRCLING	2920-1¼ 967 (1000-1¼)	2920-1½ 967 (1000-1½)	2920-3 967 (1000-3)	

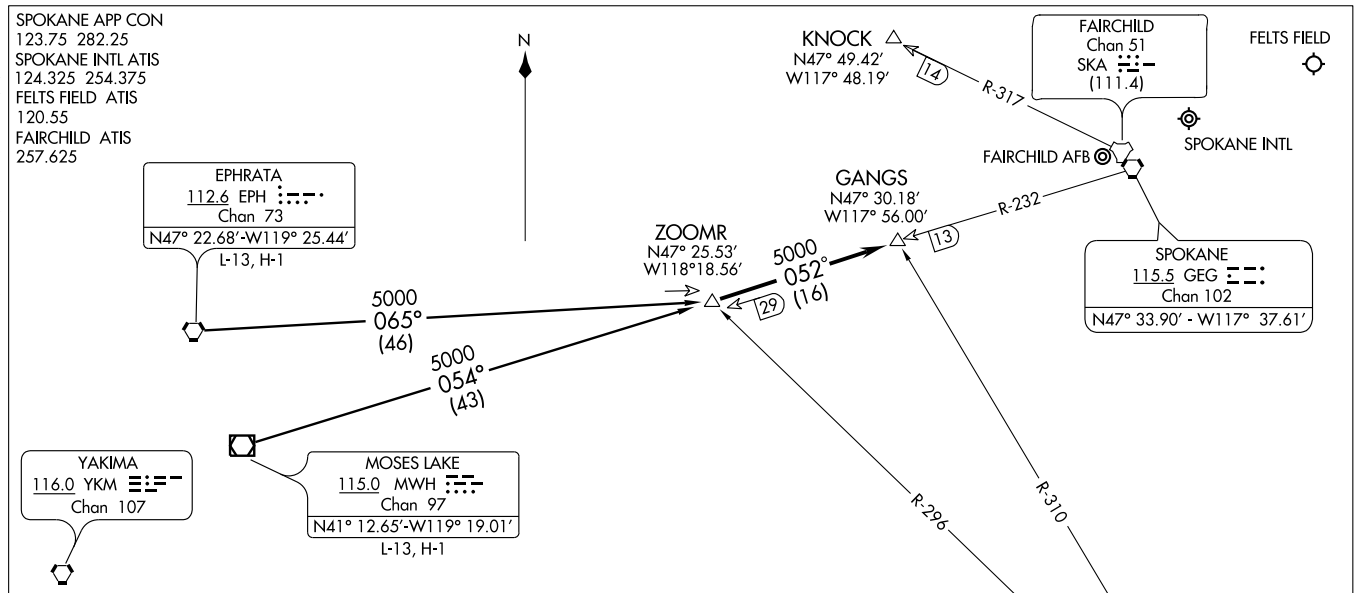


FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NW-1, 14 JAN 2010 to 11 FEB 2010

ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON



EPHRATA TRANSITION (EPH.ZOOMR1): From over EPH VORTAC via EPH R-065 to ZOOMR INT. Thence. . . .

MOSES LAKE TRANSITION (MWH.ZOOMR1): From over MWH VOR/DME via MWH R-054 to ZOOMR INT. Thence. . . .

. . . . From over ZOOMR INT via GEG R-232 to GANGS INT. Expect radar vectors to final approach course.

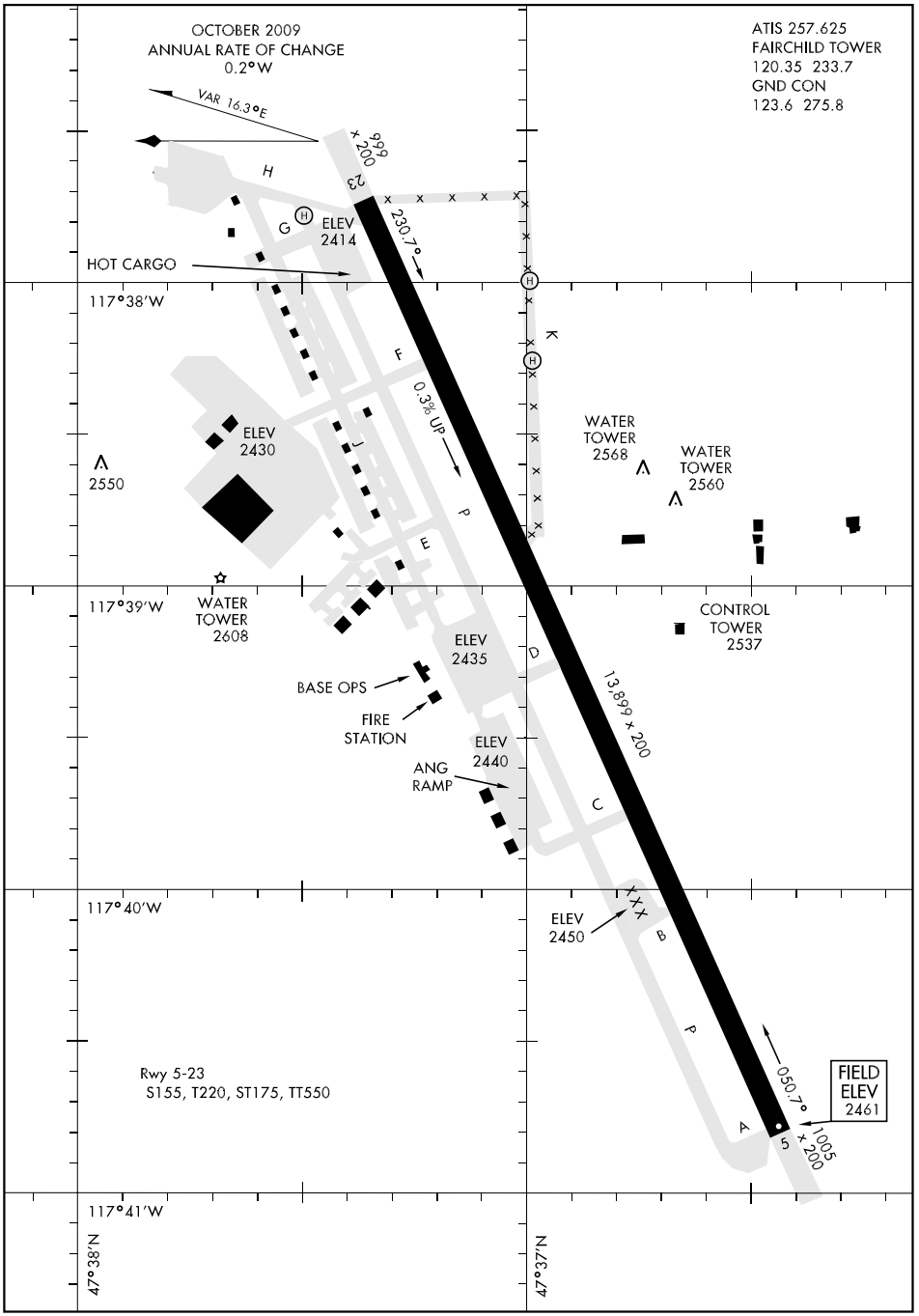
LOST COMMUNICATIONS: After GANGS INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-232, maintain last assigned altitude to GEG.

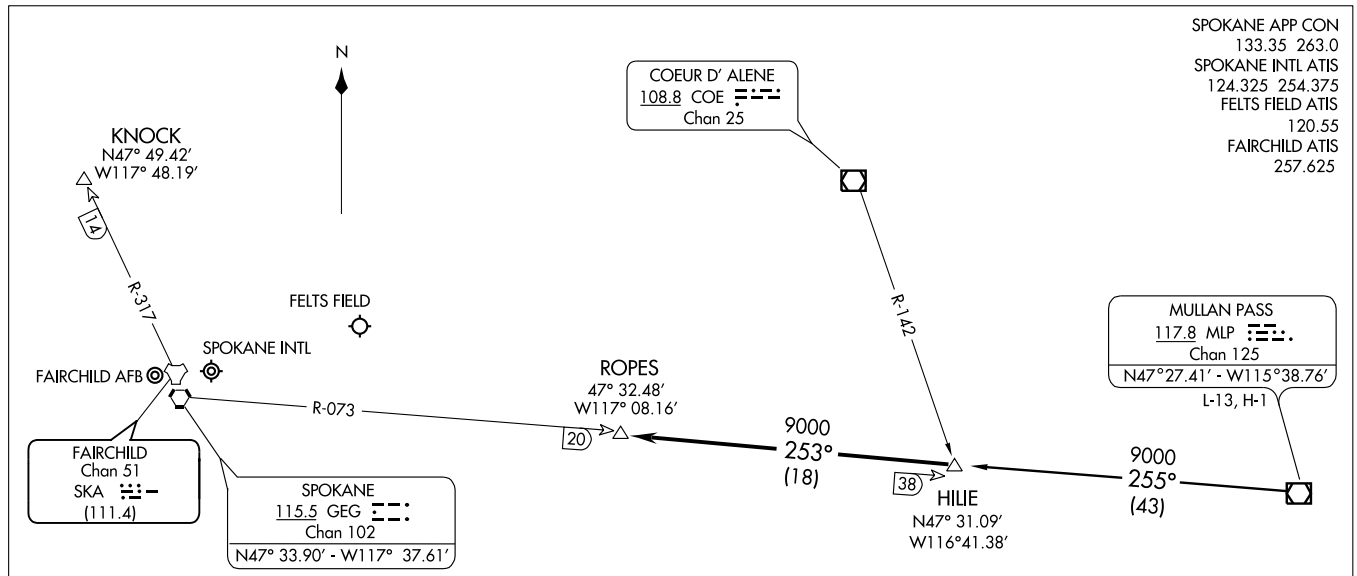
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.


OCTOBER 2009
ANNUAL RATE OF CHANGE
0.2°W
VAR 16.3°E
ATIS 257.625
FAIRCHILD TOWER
120.35 233.7
GND CON
123.6 275.8
999 x 200
23
230.7°
ELEV 2414
HOT CARGO
117°38'W
0.3% UP
ELEV 2430
2550
WATER TOWER 2568
WATER TOWER 2560
117°39'W
WATER TOWER 2608
CONTROL TOWER 2537
ELEV 2435
BASE OPS
FIRE STATION
ANG RAMP
ELEV 2440
13,899 x 200
ELEV 2450
117°40'W
Rwy 5-23
S155, T220, ST175, TT550
050.7°
FIELD ELEV 2461
1005 x 200
117°41'W
47°38'N
47°37'N

HILIE ONE ARRIVAL (HILIE.HILIE1)



MULLAN PASS TRANSITION (MLP.HILIE1): From over MLP VOR/DME via MLP R-255 to HILIE INT. Thence. . . .

. . . .From over HILIE INT via GEG R-073 to ROPES INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES INT:
Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last altitude to GEG.
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

ILS or LOC RWY 5

FAIRCHILD AFB (KSKA)

LOC I-FRC	APCH CRS	Rwy Idg 13,899 / TDZE 2461 / Arpt Elev 2461
110.3	048°	AL-553 [USAF]

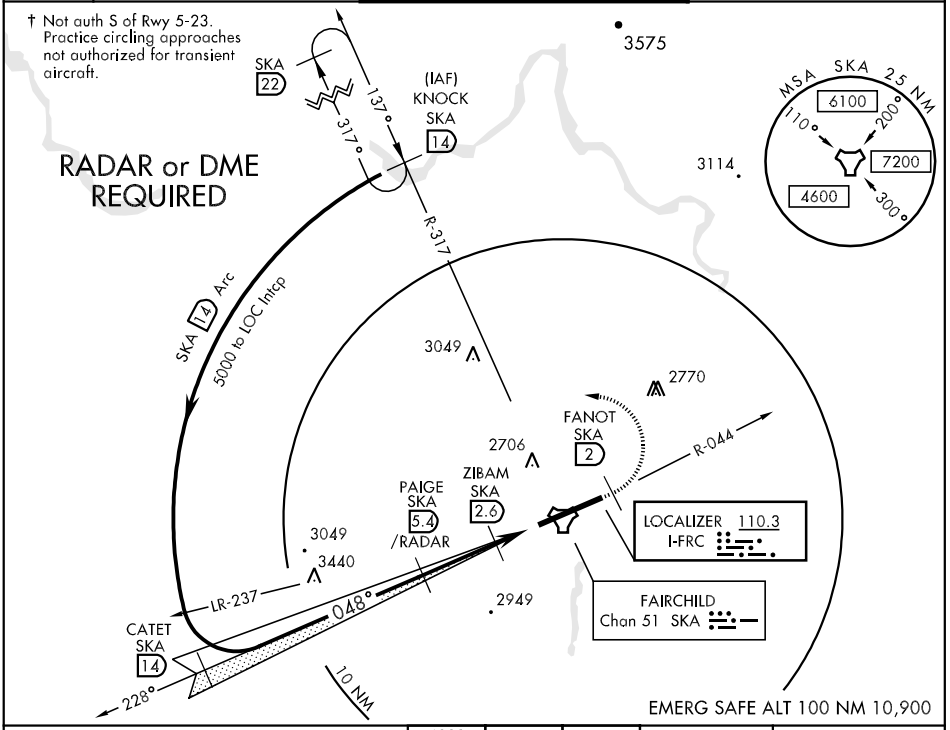
▼ *When ALS inop, increase vis to ¾ mile, RVR to 40. When TDZL/CL lights inop, increase CAT ABCD RVR to 24.
**When ALS inop increase vis to 1 mile, RVR to 50.
***When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT CD vis to 1¼ miles, RVR to 60, CAT E vis to 1½ miles.

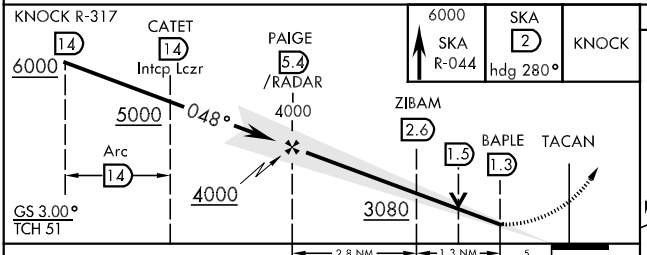
ALSF-1 (A1)

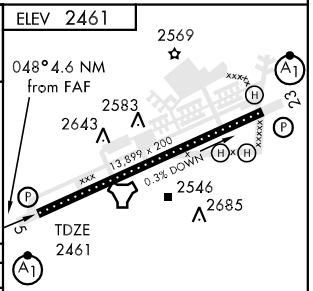
MISSED APPROACH: Climb to 6000 via SKA R-044. At SKA 2 DME turn left hdg 280° to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6000.

ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	026°-204° 133.35 263.0 205°-025° 123.75 282.25	120.35 233.7	123.6 275.8

† Not auth S of Rwy 5-23. Practice circling approaches not authorized for transient aircraft.







CATEGORY	A	B	C	D	E
S-ILS 5 *	2661/18 200 (200-½)				2661/24 200 (200-½)
S-LOC/DME 5 **	2740/24 279 (300-½)		2740/40 279 (300-¾)		
S-LOC 5 ***	2880/24 419 (500-½)		2880/40 419 (500-¾)		2880/50 419 (500-1)
CIRCLING †	3480-1¼ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3 1019 (1100-3)		

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

ILS or LOC RWY 23

FAIRCHILD AFB (KSKA)

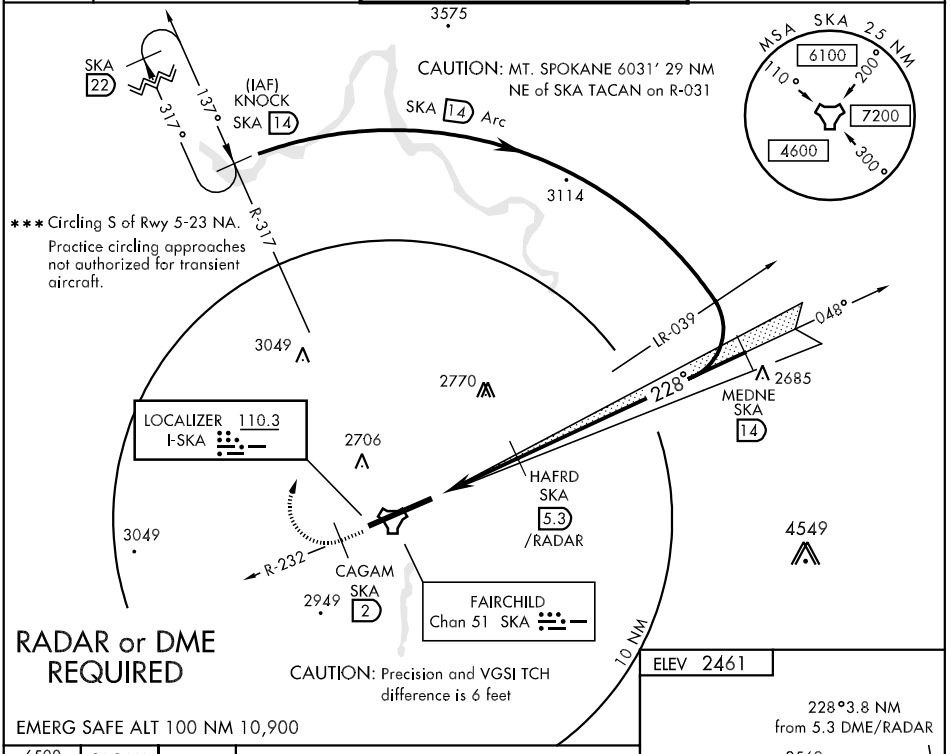
LOC I-SKA	APCH CRS	Rwy ldg 13,899 / TDZE 2422 / Arpt Elev 2461
110.3	228°	AL-553 [USAF]

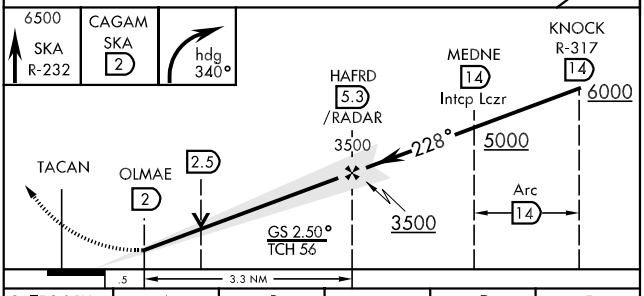
▼ * When ALS inop, increase vis to ¾ mile, RVR to 40. When TDZL/CL lights inop, increase CAT ABCD RVR to 24.
** When ALS inop, increase vis to 1 mile, RVR to 50.

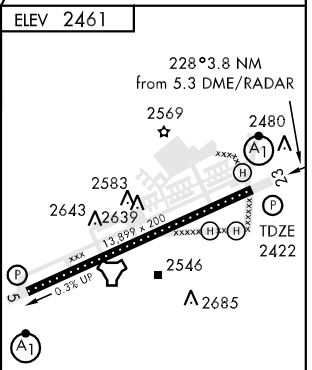
ALSF-1

MISSED APPROACH: Climb to 6500 via SKA R-232. At SKA 2 DME, turn right heading 340° to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6500.

ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	026°-204° 133.35 263.0 205°-025° 123.75 282.25	120.35 233.7	123.6 275.8







CATEGORY	A	B	C	D	E
S-ILS 23 *	2622/18 200 (200-½)				2622/24 200(200-½)
S-LOC 23 **	2720/24 298 (300-½)		2720/40 298 (300-¾)		
CIRCLING ***	3480-1¼ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3 1019 (1100-3)		

HIRL Rwy 5-23
TDZL/CL Rwy 5-23

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

TACAN RWY 5

FAIRCHILD AFB (KSKA)

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
SKA Chan 51	057°	13,899	2461	2461

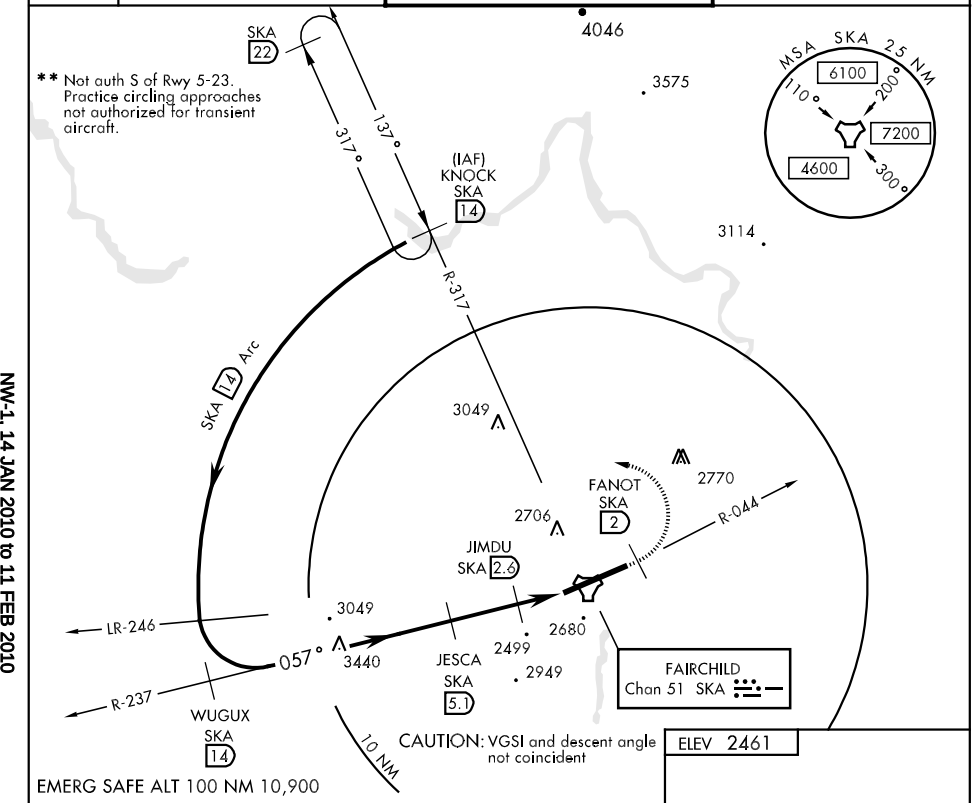
AL-553 [USAF]

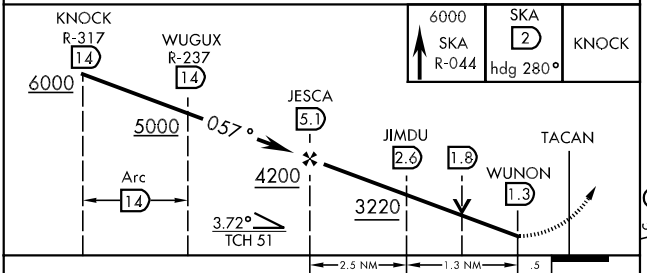
▼ * When ALS inop, CAT ABC vis to 1 mile, RVR to 50, CAT DE vis to 1¼ miles, RVR to 60.

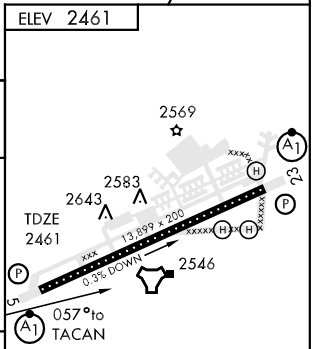
ALSF-1

MISSED APPROACH: Climb to 6000 via SKA R-044. At SKA 2 DME turn left hdg 280° to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6000.

ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	026°-204° 133.35 263.0 205°-025° 123.75 282.25	120.35 233.7	123.6 275.8







CATEGORY	A	B	C	D	E
S-5 *	2820/24 359 (400-½)		2820/40 359 (400-¾)		
CIRCLING **	3480-1¼ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3 1019 (1100-3)		

HIRL Rwy 5-23
TDZL/CL Rwy 5-23

TACAN RWY 23

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
SKA Chan 51	226°	13,899	2422	2461

AL-553 [USAF]

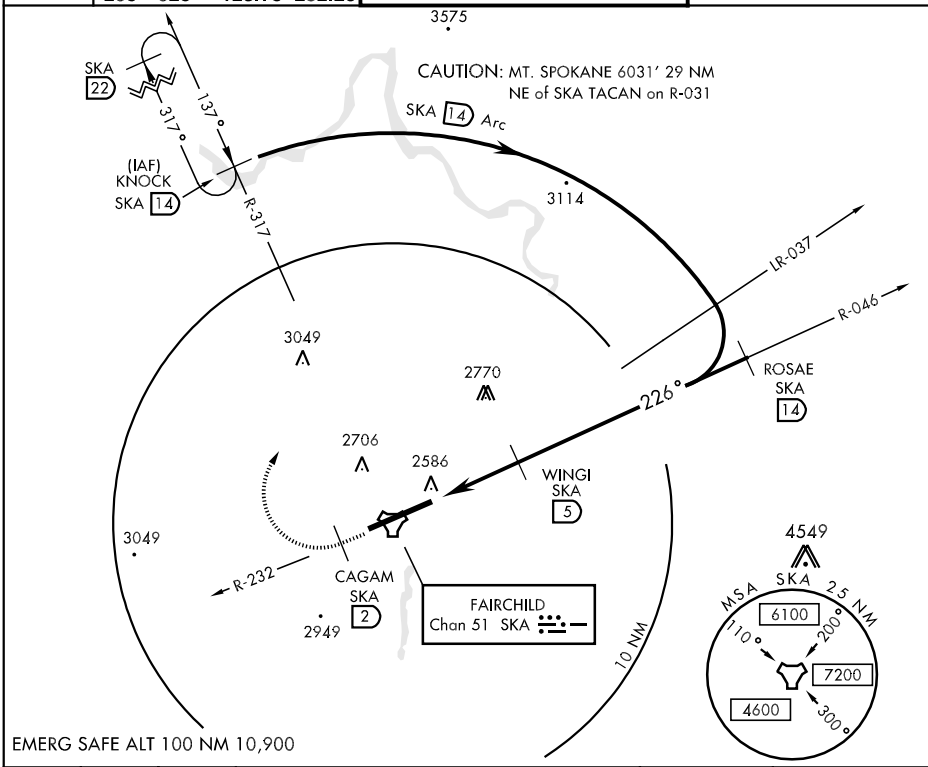
FAIRCHILD AFB (KSKA)

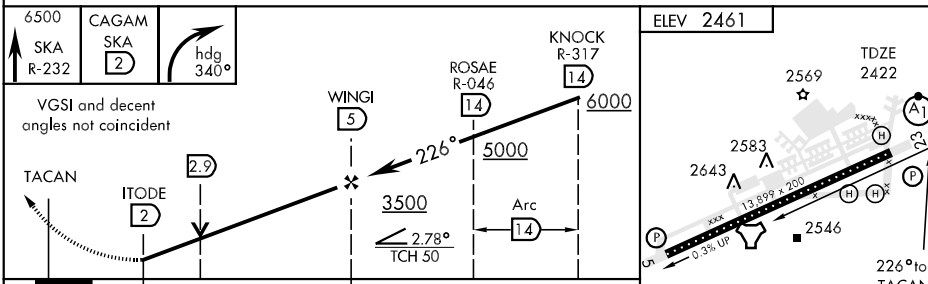
▼ * When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT CD vis to 1¼ mile, RVR to 60, CAT E vis to 1½ miles.
** Not auth S of Rwy 5-23. Practice circling approaches not authorized for transient aircraft.

ALSF-1

MISSED APPROACH: Climb to 6500 via SKA R-232. At SKA 2 DME, turn right heading 340°to intcp SKA R-317 to KNOCK and hold, continue climb in hold to 6500.

ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	026°-204° 133.35 263.0 205°-025° 123.75 282.25	120.35 233.7	123.6 275.8



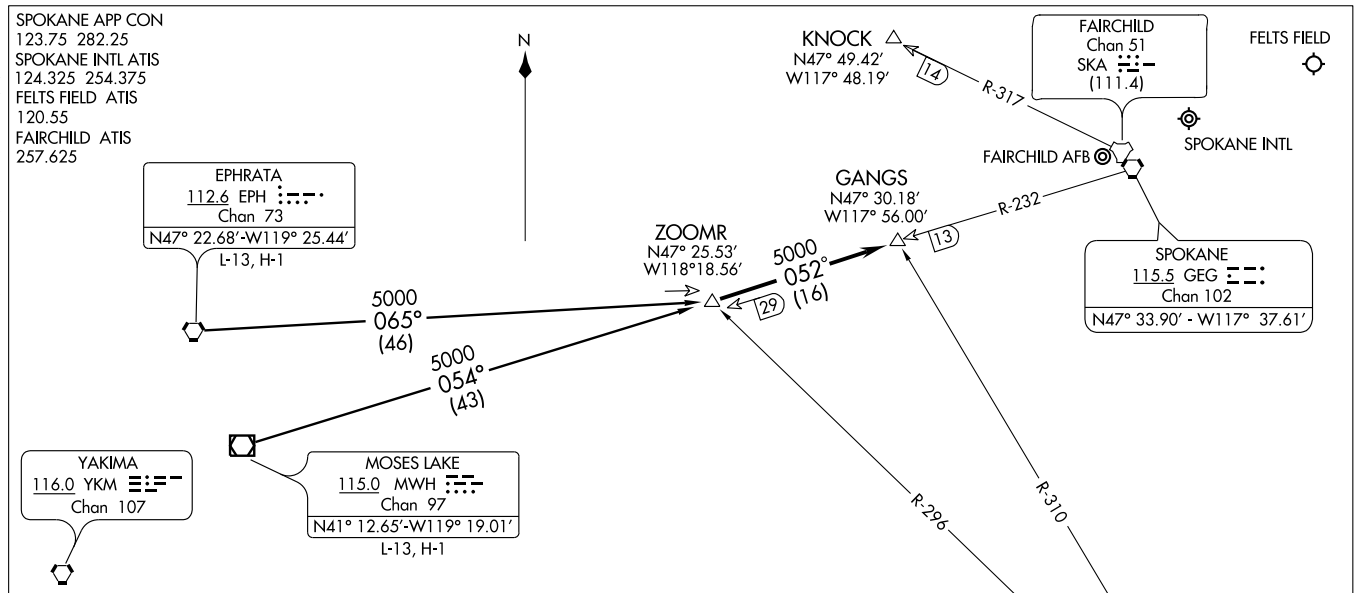


CATEGORY	A	B	C	D	E
S-TAC 23 *	2840/24 418 (400-½)		2840/40 418 (400-¾)		2840/50 418 (400-1)
CIRCLING **	3480-1¼ 1019 (1100-1¼)	3480-1½ 1019 (1100-1½)	3480-3 1019 (1100-3)		

HIRL Rwy 5-23
TDZL/CL Rwy 5-23

ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON



EPHRATA TRANSITION (EPH.ZOOMR1): From over EPH VORTAC via EPH R-065 to ZOOMR INT. Thence. . . .

MOSES LAKE TRANSITION (MWH.ZOOMR1): From over MWH VOR/DME via MWH R-054 to ZOOMR INT. Thence. . . .

. . . . From over ZOOMR INT via GEG R-232 to GANGS INT. Expect radar vectors to final approach course.

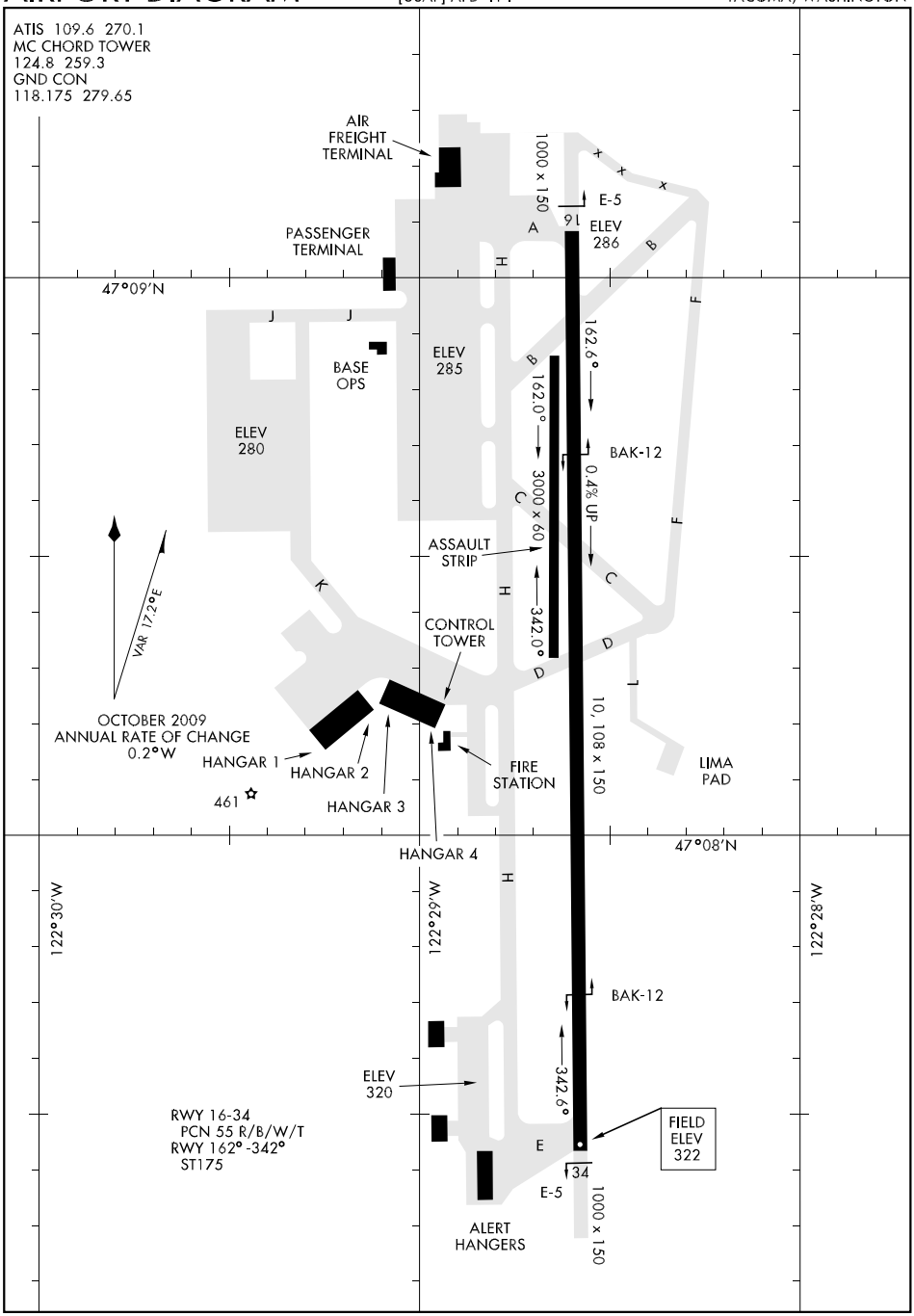
LOST COMMUNICATIONS: After GANGS INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-232, maintain last assigned altitude to GEG.

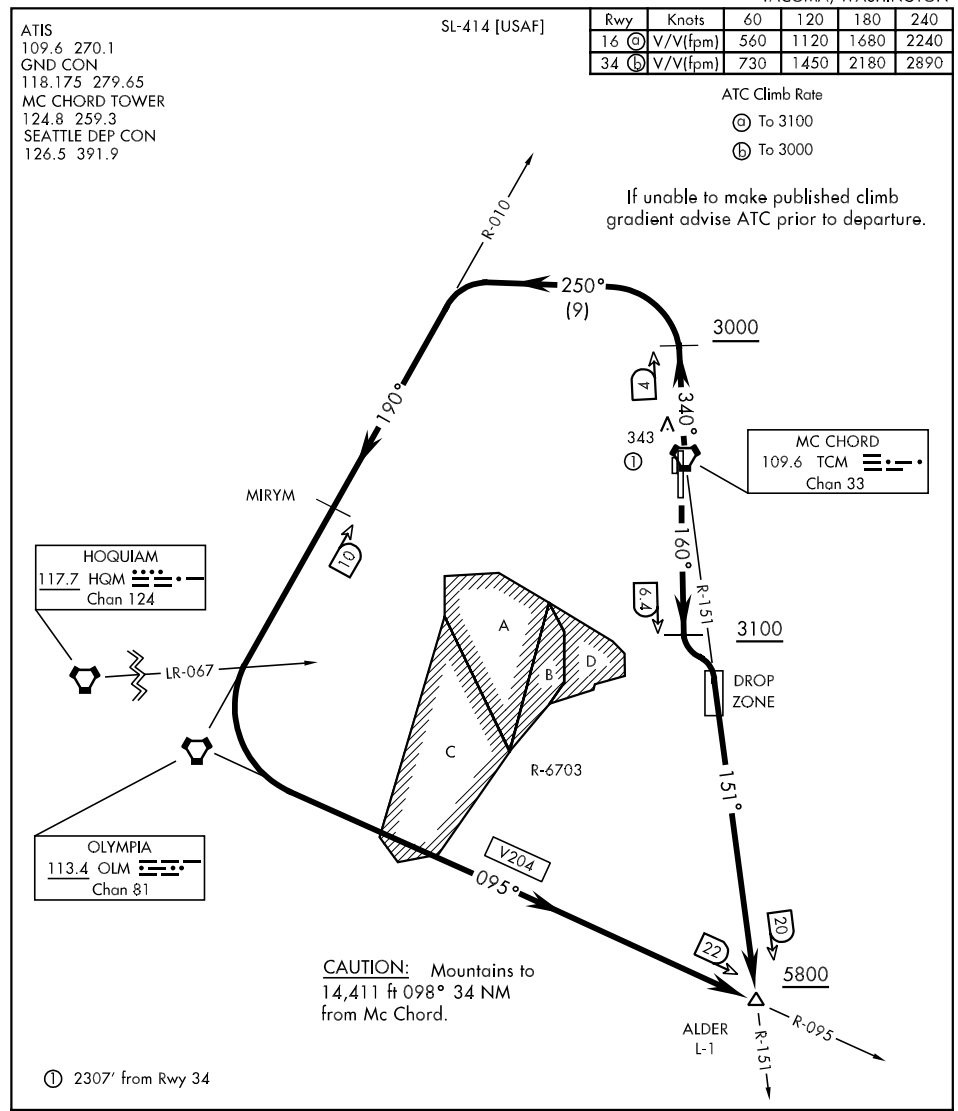
Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.



AIRPORT DIAGRAM TACOMA, WASHINGTON



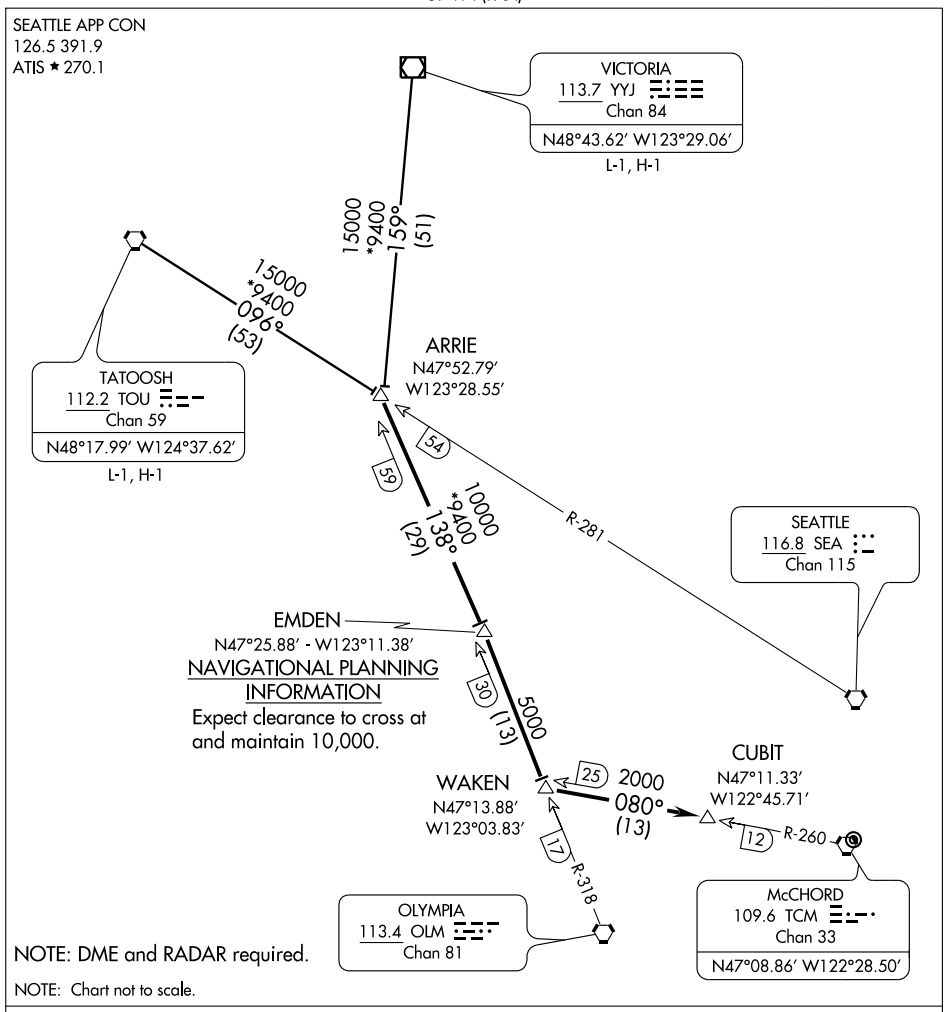
NW-1, 14 JAN 2010 to 11 FEB 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Track heading 160° to TCM VORTAC 6.4 DME, then turn left to intercept the TCM R-151 to ALDER. Cross TCM 6.4 DME at or above 3100, cross ALDER at or above 5800.

TAKE-OFF RWY 34: Climb on track 340° to TCM VORTAC 4 DME. Cross TCM 4 DME at or above 3000, then turn left heading 250° to intercept OLM VORTAC R-010/10 DME (MIRYM) to OLM VORTAC. Then via V204 (OLM R-095) to ALDER. Cross ALDER at or above 5800.

ARRIE FIVE ARRIVAL



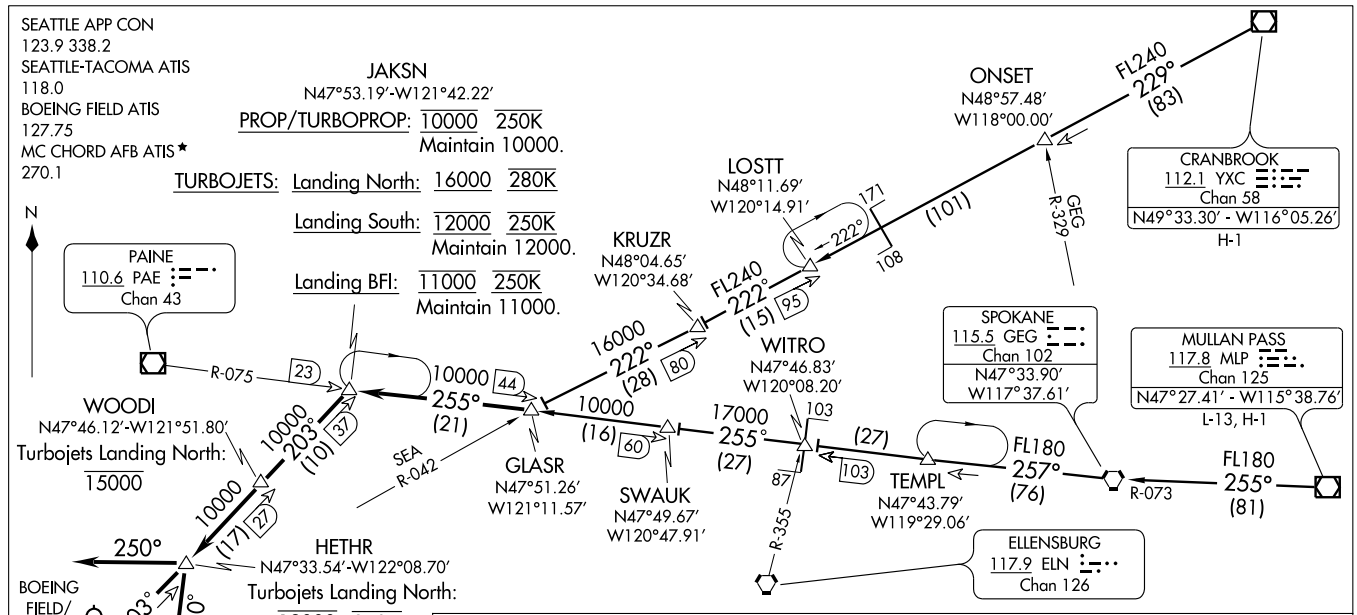
TATOOSH TRANSITION (TOU.ARRIE5): From over TOU VORTAC via TOU R-096 to ARRIE DME Fix. Thence. . . .

VICTORIA TRANSITION (YYJ.ARRIE5): From over YYJ VOR/DME via YYJ R-159 to ARRIE DME Fix. Thence. . . .

. . . .From over ARRIE DME Fix via OLM R-318 and TCM R-260 to CUBIT INT. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: Proceed direct to TCM VORTAC.

GLASR SEVEN ARRIVAL



NOTE: Chart not to scale.

NOTE: DME and RADAR required.

CRANBROOK TRANSITION (YXC.GLASR7): From over YXC VOR/DME via YXC R-229 and SEA R-042 to GLASR INT. Thence....

MULLAN PASS TRANSITION (MLP.GLASR7): From over MLP VOR/DME via MLP R-255 and GEG R-073 to GEG VORTAC, then via GEG R-257 and PAE R-075 to GLASR INT. Thence....

....from over GLASR/PAE 44 DME via PAE R-075 to JAKSN INT/PAE 23 DME, then via the SEA R-023 to WOODI/SEA 27 DME, then via SEA R-023 to HETHR/SEA 10 DME, Thence....

LANDING NORTH: Heading 160° for vectors to final approach course.

LANDING SOUTH: Heading 250° for vectors to final approach course.

LANDING McCHORD AFB: From over HETHR DME FIX, proceed direct SEA VORTAC.

LOST COMMUNICATIONS: From over HETHR DME FIX, proceed direct SEA VORTAC.

ILS or LOC RWY 16

LOC I-MAR	APCH CRS	Rwy ldg 10,108 / TDZE 286 / Arpt Elev 322
109.9	160°	AL-414 [USAF]

MC CHORD AFB (KTCM)

▼ * When ALS inop, increase vis to ¾ mile, RVR to 40.
** When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.

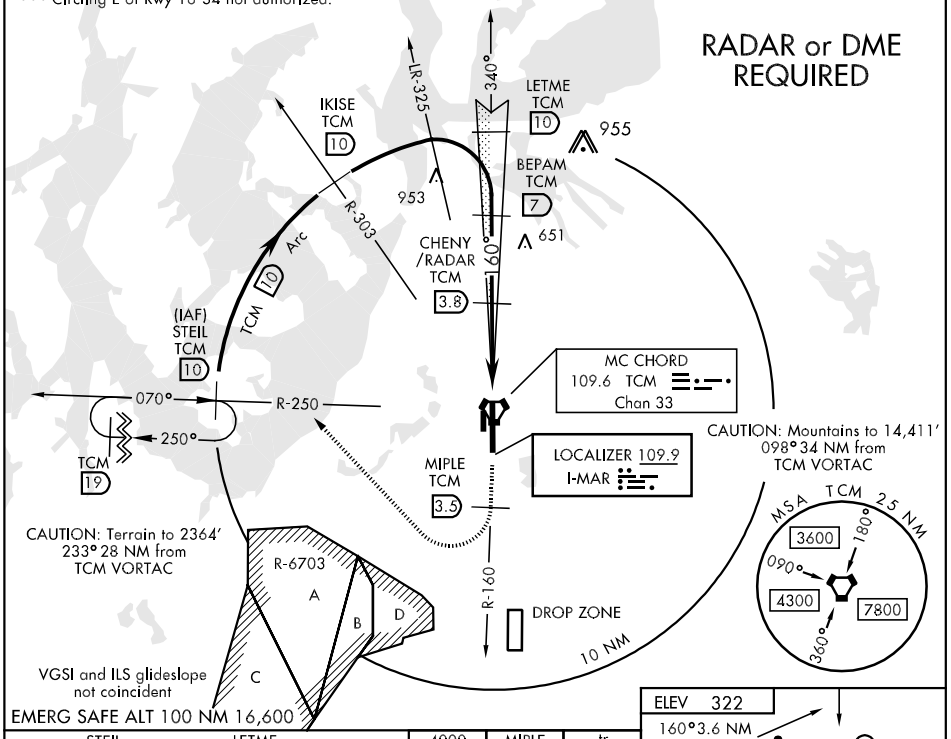
ALSF-1 (A1)

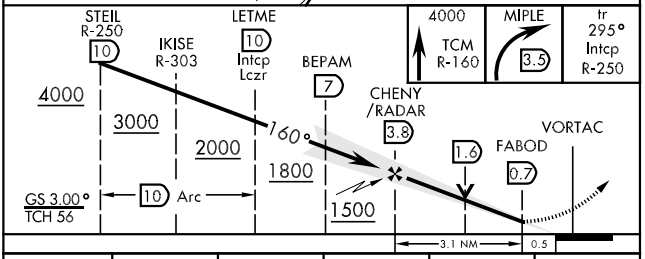
MISSED APPROACH: Climb to 4000 on TCM VORTAC R-160. At 3.5 DME turn right via 295° course to intercept TCM R-250 to STEIL and hold. Continue climb in hold to 4000.

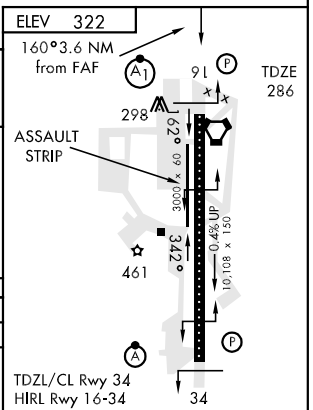
ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

*** Circling E of Rwy 16-34 not authorized.

RADAR or DME REQUIRED







CATEGORY	A	B	C	D	E
S-ILS 16 *	486/18 200 (200-½)		486/24 200 (200-½)		
S-LOC 16 **	800/40 514 (500-¾)		800/50 514 (500-1)	800/60 514 (500-1¼)	
CIRCLING ***	940-1 618 (700-1)		940-1¾ 618 (700-1¾)	940-2 618 (700-2)	940-2¼ 618 (700-2¼)

FAF to MAP 3.1 NM					
Knots	60	90	120	150	180
Min:Sec	3:06	2:04	1:33	1:14	1:02

NW-1, 14 JAN 2010 to 11 FEB 2010

ILS or LOC Y RWY 34

LOC I-TCM	APCH CRS	Rwy ldg 10,108 TDZE 322 Arpt Elev 322
108.5	340°	

AL-414 [USAF]

MC CHORD AFB (KTCM)

* When ALS inop, increase vis ¾ mile, RVR to 40.
** When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.

ALSF-2

† MISSED APPROACH: Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

*** Circling E of Rwy 16-34 not authorized.

† CAUTION: Missed Approach Minimum Climb Rate to 3000

	Knots	60	120	180	240
ILS	V/V(fpm)	320	640	960	1280
LOC	V/V(fpm)	270	540	810	1080

ATC Minimum Climb Rate

CUBIT TCM 12

OYABO TCM 6

R-338

080°

260°

R-260

TCM 21

10 NM

LOCALIZER 108.5 I-TCM

MC CHORD 109.6 TCM Chan 33

CAUTION: Terrain to 2364′ 233° 28 NM fromTCM VORTAC

SPAAN /RADAR TCM 5.8

350

CAUTION: Mountains to 14,411′ 098° 34 NM from TCM VORTAC

R6703A

R6703D

R6703C

R6703B

DROP ZONE

340°

RADAR or DME REQUIRED

MSA TCM 25 NM

3600

180°

090°

4300

7800

360°

RIMOE TCM 13

(IAF) MCKEN OLM 15.3

685

160°

R-095

4000

047° (4)

OLYMPIA 113.4 OLM Chan 81

(IAF) ALDER OLM 22

307° (4.2)

4000

4000

EMERG SAFE ALT 100 NM 16,600

4000 TCM R-338	OYABO tr 215°	TCM R-260 CUBIT

RIMOE 13

SPAAN /RADAR 5.8

4000

340°

VORTAC

GUTBE 3.1 1.9

1800

GS 3.00° TCH 58

0.5 3.9 NM

ELEV 322

A1

91

ASSAULT STRIP

162° 69 x 3000

0.48% DOWN 10,108 x 150

342°

461

TDZL/CL Rwy 34

HIRL Rwy 16-34

TDZE 322

340° 4.4 NM from FAF

34

CATEGORY	A	B	C	D
S-ILS 34 *	522/18 200 (200-½)		522/24 200 (200-½)	
S-LOC 34 **	900/24 578 (600-½)		900/50 578 (600-1)	900/60 578 (600-1¼)
CIRCLING ***	940-1 618 (700-1)		940-1¾ 618 (700-1¾)	940-2 618 (700-2)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

ILS or LOC Z RWY 34

LOC I-TCM	APCH CRS	Rwy ldg 10,108 TDZE 322 Arpt Elev 322
108.5	340°	

AL-414 [USAF]

MC CHORD AFB (KTCM)

▼ * When ALS inop, increase vis ¾ mile, RVR to 40.
** When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.

ALSF-2 (A)

† MISSED APPROACH: Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

*** Circling E of Rwy 16-34 not authorized.

Knots	60	120	180	240
ILS V/V(fpm)	320	640	960	1280
LOC V/V(fpm)	270	540	810	1080

ATC Minimum Climb Rate

† CAUTION: Missed Approach Minimum Climb Rate to 3000

953 OYABO TCM 6

R-338

670

(IAF) CUBIT TCM 4000 12

080°

260°

R-260

LOCALIZER 108.5 I-TCM

MC CHORD 109.6 TCM Chan 33

CAUTION: Mountains to 14,411' 098° 34 NM from TCM VORTAC

10 NM

TCM 21

CAUTION: Terrain to 2364' 233° 28 NM from TCM VORTAC

TCM 12 3200 Arc

350

R-095

SPAAN /RADAR TCM 5.8

(IAF) OOHOP TCM 12

3200

R6703A

DROP ZONE

R6703D

R6703B

R6703C

340°

LR-168

LR-148

676

3200 TCM 12 Arc

MSA TCM 25 NM

3600

180°

090°

4300

7800

360°

JETEM TCM 12

160°

NW-1, 14 JAN 2010 to 11 FEB 2010

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 16,600

4000 TCM R-338 | OYABO tr 215° | TCM R-260 CUBIT

SPAAN /RADAR 5.8

JETEM 12 3200

340°

Intcpt localizer

VORTAC

GUTBE 1.9

3.1

1800

GS 3.00° TCH 58

0.5 3.9 NM

ELEV 322

A1 9L P

162° 3000 x 60

ASSAULT STRIP

0.4% DOWN

10,108 x 150

342°

461

TDZL/CL Rwy 34

HIRL Rwy 16-34

A P TDZE 322

340° 4.4 NM from FAF

34

CATEGORY	A	B	C	D
S-ILS 34 *	522/24		200 (200-½)	
S-LOC 34 **	900/24 578 (600-1)		900/50 578 (600-1)	900/60 578 (600-1¼)
CIRCLING ***	940-1 618 (700-1)		940-1¾ 618 (700-1¾)	940-2 618 (700-2)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

ILS RWY 34 (CAT II)

LOC I-TCM	APCH CRS	Rwy ldg	TDZE	Arpt Elev
108.5	340°	10,108	322	322

AL-414 [USAF]

MC CHORD AFB (KTCM)

ALSF-2

† MISSED APPROACH: Climb to 4000 on TCM VORTAC R-338 to OYABO, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

† CAUTION: Missed Approach Minimum Climb Rate to 3000

Knots	60	120	180	240
V/V(fpm)	340	680	1020	1360

ATC Minimum Climb Rate

953

OYABO TCM 6

R-338

670

(IAF) CUBIT TCM 12

3600

080°

260°

R-260

CAUTION: Terrain to 2364' 233° 28 NM from TCM VORTAC

LOCALIZER 108.5 I-TCM

MC CHORD 109.6 TCM Chan 33

CAUTION: Mountains to 14,411' 098° 34 NM from TCM VORTAC

TCM 21

TCM 12 Arc

3600

IM

(IAF) OOHOP TCM 12

R-095

3600

SPAAN /RADAR TCM 5.8

R6703A

R6703D

DROP ZONE

10 NM

3600

TCM 12 Arc

MSA TCM 25 NM

3600

180°

090°

4300

7800

360°

R6703B

R6703C

LR-168

340°

LR-148

676

(IAF) MCKEN OLM 15.3

JETEM TCM 12

OLYMPIA 113.4 OLM Chan 81

R-095

3600

043° (4)

160°

3600

EMERG SAFE ALT 100 NM 16,600

ELEV 322

ASSAULT STRIP

9L

162°

3000 x 60

0.4% DOWN

10,108 x 150

342°

461

385

34

TDZE 322

TDZL/CL Rwy 34

HIRL Rwy 16-34

4000	OYABO	CUBIT
TCM R-338	tr 215°	TCM R-260

SPAAN /RADAR 5.8

JETEM 12

3600

340°

VORTAC

IM

DH

318 MSL

1800

(RA148)

GS 3.00° TCH 58

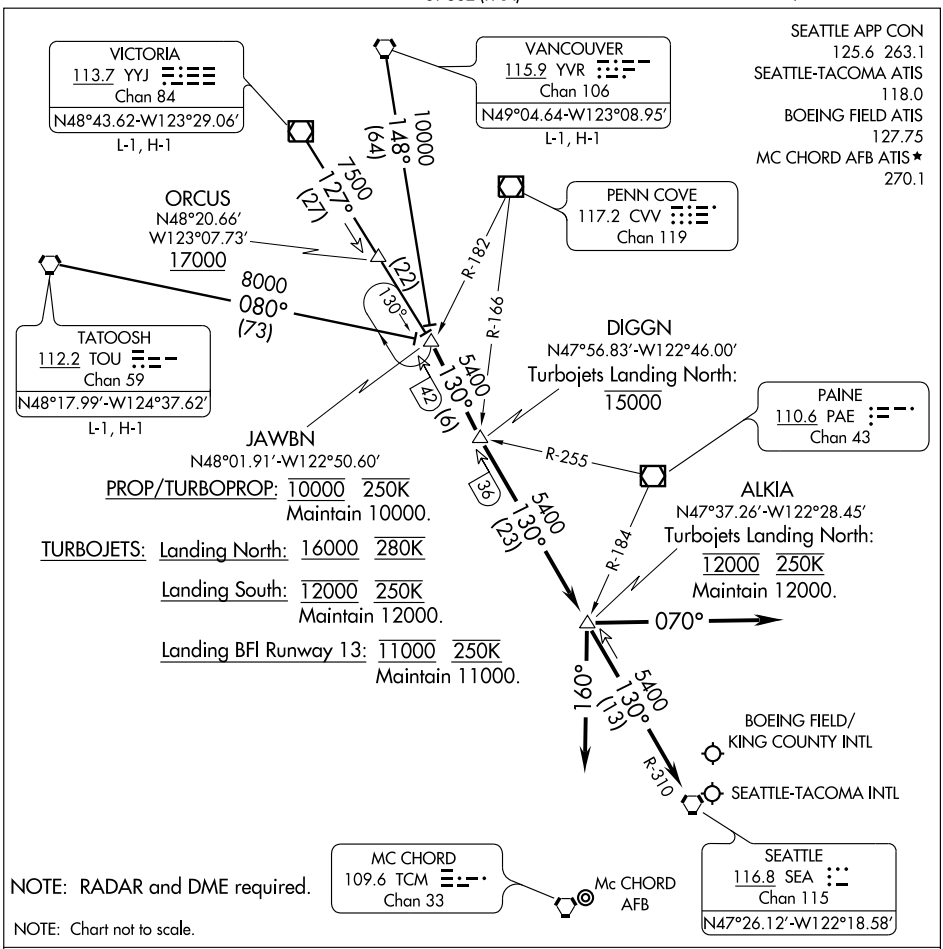
1194' 838' 4.3 NM

CATEGORY	A	B	C	D	E
S-ILS 34	424/12		102 (RA 148)		

JAWBN ONE ARRIVAL

ST-582 (FAA)

SEATTLE, WASHINGTON



PROP/TURBOPROP: 10000 250K
Maintain 10000.

TURBOJETS: Landing North: 16000 280K

Landing South: 12000 250K
Maintain 12000.

Landing BFI Runway 13: 11000 250K
Maintain 11000.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

TATOOSH TRANSITION (TOU.JAWBN1): From over TOU VORTAC via TOU R-080 to JAWBN INT. Thence....

VANCOUVER TRANSITION (YVR.JAWBN1): From over YVR VORTAC via YVR R-148 to JAWBN INT. Thence....

VICTORIA TRANSITION (YYJ.JAWBN1): From over YYJ VOR/DME via YYJ R-127 to JAWBN INT. Thence....

....From over JAWBN INT/SEA 42 DME via SEA R-310 to DIGGN/SEA 36 DME then via SEA R-310 to ALKIA INT/SEA 13 DME, thence....

LANDING NORTH: Depart ALKIA INT heading 160° for vectors to final approach course.

LANDING SOUTH: Depart ALKIA INT heading 070° for vectors to final approach course.

LANDING McCHORD AFB: After ALKIA INT proceed direct SEA VORTAC.

LOST COMMUNICATIONS: After ALKIA INT proceed direct SEA VORTAC.

OLYMPIC-THREE DEPARTURE

SL-414 [USAF]

TACOMA, WASHINGTON

ATIS
109.6 270.1
GND CON
118.175 279.65
MC CHORD TOWER
124.8 259.3
SEATTLE DEP CON
126.5 391.9

Rwy	Knots	60	120	180	240
16 ⓐ	V/V(fpm)	320	640	960	1280
34 ⓑ	V/V(fpm)	650	1300	1950	2600

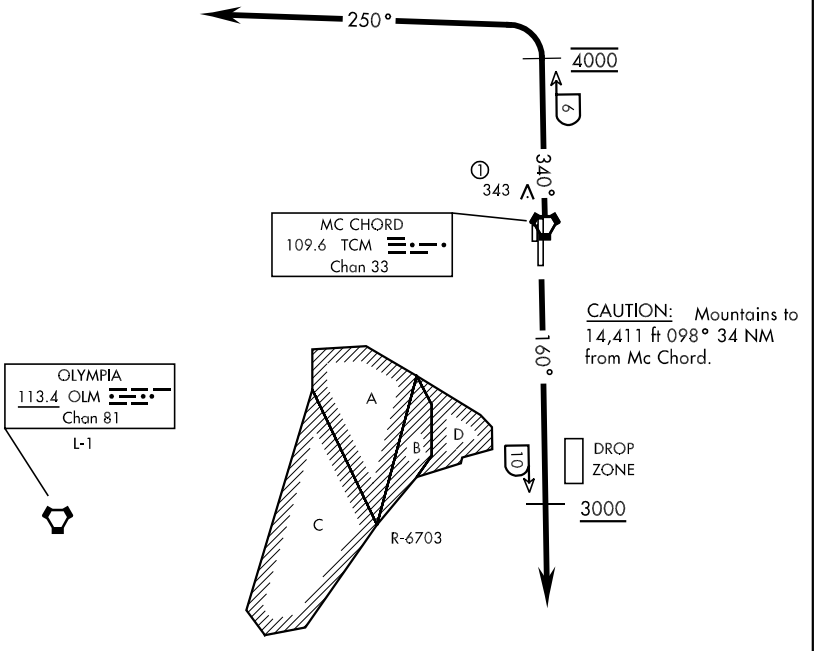
ATC Climb Rate
ⓐ To 10 DME
ⓑ To 6 DME

If unable to make published climb gradient advise ATC prior to departure.

SEATTLE
116.8 SEA
Chan 115
L-1

RADAR REQUIRED

Maximum 250 KIAS



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on a track of 160°. Cross TCM VORTAC 10 DME at or above 3000. Maintain (assigned altitude). Expect radar vectors within TCM 8 DME after departure.

TAKE-OFF RWY 34: Climb on a track of 340° to TCM VORTAC 6 DME. Cross TCM 6 DME at 4000. Then turn left tracking 250°. Maintain (assigned altitude). Expect radar vectors.

TACOMA, WASHINGTON

OLYMPIC-THREE DEPARTURE

PUGET-FIVE DEPARTURE

SL-414 [USAF]

TACOMA, WASHINGTON

ATIS
109.6 270.1
GND CON
118.175 279.65
MC CHORD TOWER
124.8 259.3
SEATTLE DEP CON
126.5 391.9

Rwy	Knots	60	120	180	240
16 ⓓ	V/V(fpm)	320	640	960	1280

ATC Climb Rate

ⓓ To 10 DME

If unable to make published climb gradient advise ATC prior to departure.

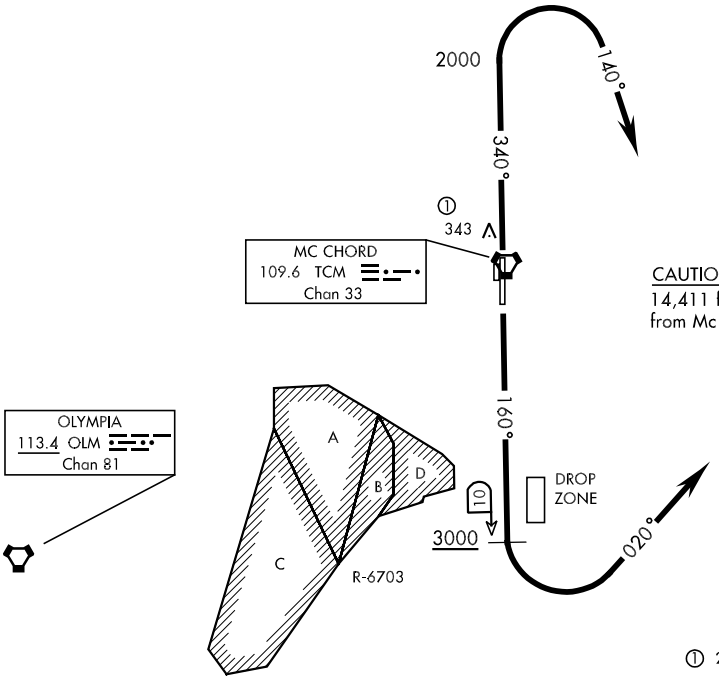
RADAR REQUIRED

Maximum 250 KIAS

Radar vectors required within 10 NM after departure

SEATTLE
116.8 SEA
Chan 115

L-1



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on a track of 160° to TCM VORTAC 10 DME, then turn left tracking 020°. Cross TCM 10 DME at or above 3000. Maintain (assigned altitude). Expect radar vectors.

TAKE-OFF RWY 34: Climb on a track of 340° to 2000. Then turn right, tracking 140°. Maintain (assigned altitude). Expect radar vectors.

TACAN RWY 16

TACAN TCM Chan 33	APCH CRS 153°	Rwy ldg 10,108 TDZE 286 Arpt Elev 322

AL-414 [USAF]

MC CHORD AFB (KTCM)

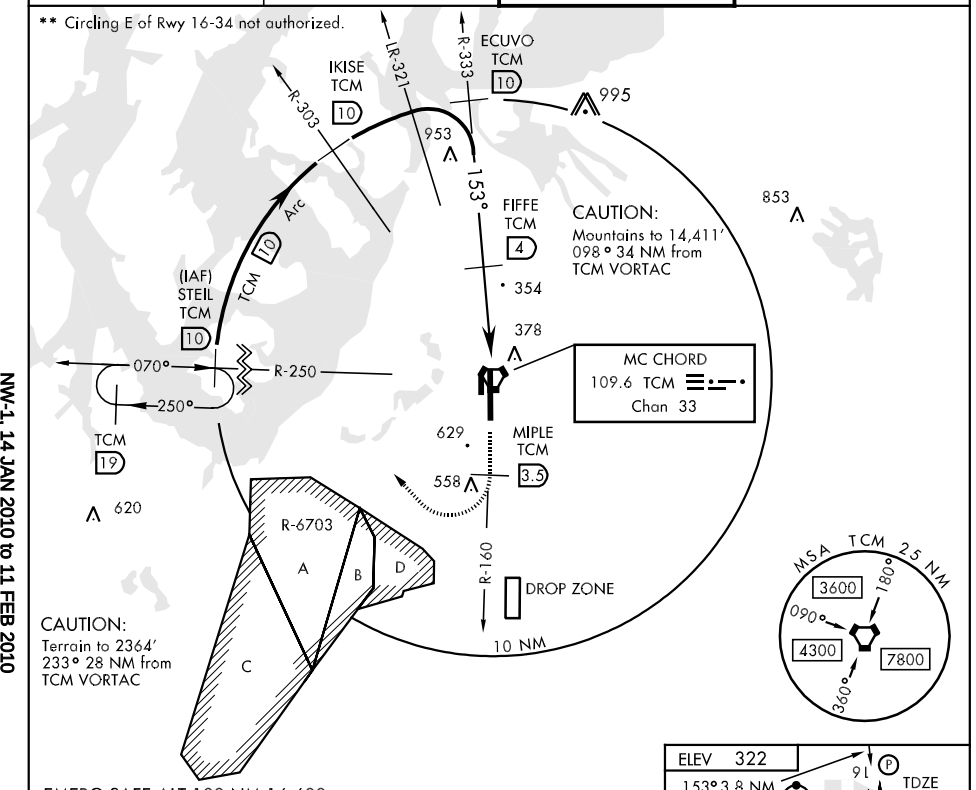
* When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT DE vis to 1¾ miles.

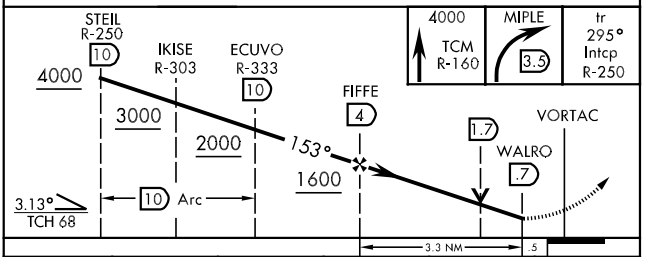
ALSF-1

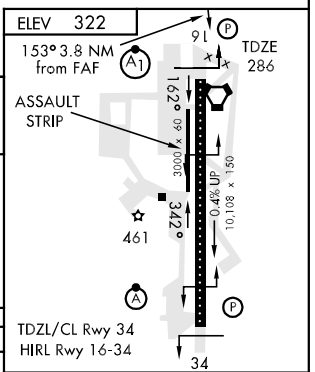
MISSED APPROACH: Climb to 4000 on TCM VORTAC R-160. At TCM 3.5 DME turn right via 295° course to intercept TCM R-250 to STEIL and hold, continue climb in hold to 4000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

** Circling E of Rwy 16-34 not authorized.







CATEGORY	A	B	C	D	E
S-16 *	800/40 514 (500-¾)		800/50 514 (500-1)	800/60 514 (500-1¼)	
CIRCLING **	940-1 618 (700-1)		940-1¾ 618(700-1¾)	940-2 618 (700-2)	940-2¼ 618(700-2¼)

FAF to MAP 3.3 NM

Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

NW-1, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 34

TACAN TCM Chan 33	APCH CRS 338°	Rwy ldg 10,108 TDZE 322 Arpt Elev 322

AL-414 [USAF]

MC CHORD AFB (KTCM)

▼ * When ALS inop, increase CAT AB vis to 1 mile, RVR to 50, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.

ALSF-2

† MISSED APPROACH: Climb to 4000 on TCM VORTAC R-338 to 6 DME. Cross TCM 6 DME at or above 3000, then turn left via 215° course to intercept TCM R-260 to CUBIT and hold. Continue climb in hold to 4000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
109.6 270.1	126.5 391.9	124.8 259.3	118.175 279.65

** Circling E of Rwy 16-34 not authorized.

Knots	60	120	180	240
V/V(fpm)	270	540	810	1080

ATC Minimum Climb Rate

† CAUTION: Missed Approach Minimum Climb Rate to 3000

953

R-338

670

6 OYABO TCM

(IAF) CUBIT TCM 12

3500

080°

260°

R-260

MC CHORD 109.6 TCM Chan 33

CAUTION: Mountains to 14,411' 098° 34 NM from TCM VORTAC

TCM 21

412

TCM 12 Arc 3500

630

FEGAK TCM 6

(IAF) OOHOP TCM 12

3500

R-095

10 NM

3500 TCM 12 Arc

CAUTION: Terrain to 2364' 233° 28 NM from TCM VORTAC

R6703A

R6703D

DROP ZONE

LR-148

338°

LR-168

R6703B

R6703C

675

MSA TCM 2.5 NM

180°

3600

090°

4300

7800

360°

(IAF) MCKEN OLM 15.3

12 CEVET TCM

R-095

3500

037° (4.4)

R-158

OLYMPIA 113.4 OLM Chan 81

EMERG SAFE ALT 100 NM 16,600

ELEV 322

91

A1

ASSAULT STRIP

162° 69 x 3000

0.48% DOWN

10,108 x 150

342°

461

TDZL/CL Rwy 34

HIRL Rwy 16-34

TDZE 322

34

338° 4.6 NM from FAF

4000 TCM R-338

OYABO 6

tr 215° TCM R-260

FEGAK 6

CEVET 12

3500

338°

VORTAC

EDEBE 1.9

3.1

1900

3.13° TCH 60

.5

4.1 NM

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

CATEGORY	A	B	C	D
S-34 *	900/24 578 (600-½)		900/50 578 (600-1)	900/60 578 (600-1¼)
CIRCLING **	940-1 618 (700-1)		940-1¾ 618 (700-1¾)	940-2 618 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WHYTE FOUR ARRIVAL

PENDLETON TRANSITION (PDT.WHYTE4): From over PDT VORTAC via PDT R-276 and OLM R-095 to WHYTE/OLM 57 DME. Thence....
YAKIMA TRANSITION (YKM.WHYTE4): From over YKM VORTAC via YKM R-250 to WHYTE/OLM 57 DME. Thence....
.... From over WHYTE/OLM 57 DME via OLM R-095 to WEBIM/OLM 35 DME, then via OLM R-095 to ALDER INT. Thence....
.... RWY 16: Via OLM R-095 to OLM VORTAC, then via OLM R-015 to STEIL INT; expect ILS or LOC RWY 16 or TACAN RWY 16.
.... RWY 34: Expect ILS or LOC Y RWY 34, ILS or LOC Z RWY 34 or ILS Z RWY 34 (CAT II).

SEATTLE APP CON
126.5 391.9
ATIS ★ 270.1

SEATTLE
116.8 SEA
Chan 115

MC CHORD
109.6 TCM
Chan 33

160°

STEIL
N47°09.19′
W122°43.15′

10
R-250

LOCALIZER 109.9
I-MAR

LOCALIZER 108.5
I-TCM

4000
015°
(13)

R-095

SEA
R-168

340°

6000
275°
(22)

ALDER
N46°49.29′
W122°24.85′

WEBIM
N46°43.91′ - W122°07.63′
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect to cross at 10000

6200
(13)

35

10000
275°
(22)

OLYMPIA
113.4 OLM
Chan 81
N46°58.30′
W122°54.11′

15000
*10000
250°
(50)

57

WHYTE
N46°34.71′
W121°38.62′

YAKIMA
116.0 YKM
Chan 107
N46°34.21′-W120°26.68′
L-13, H-1

70

112

15000
*10300
276°
(125)

PENDLETON
114.7 PDT
Chan 94
N45°41.91′-W118°56.32′
L-13, H-1

N

NOTE: DME required.

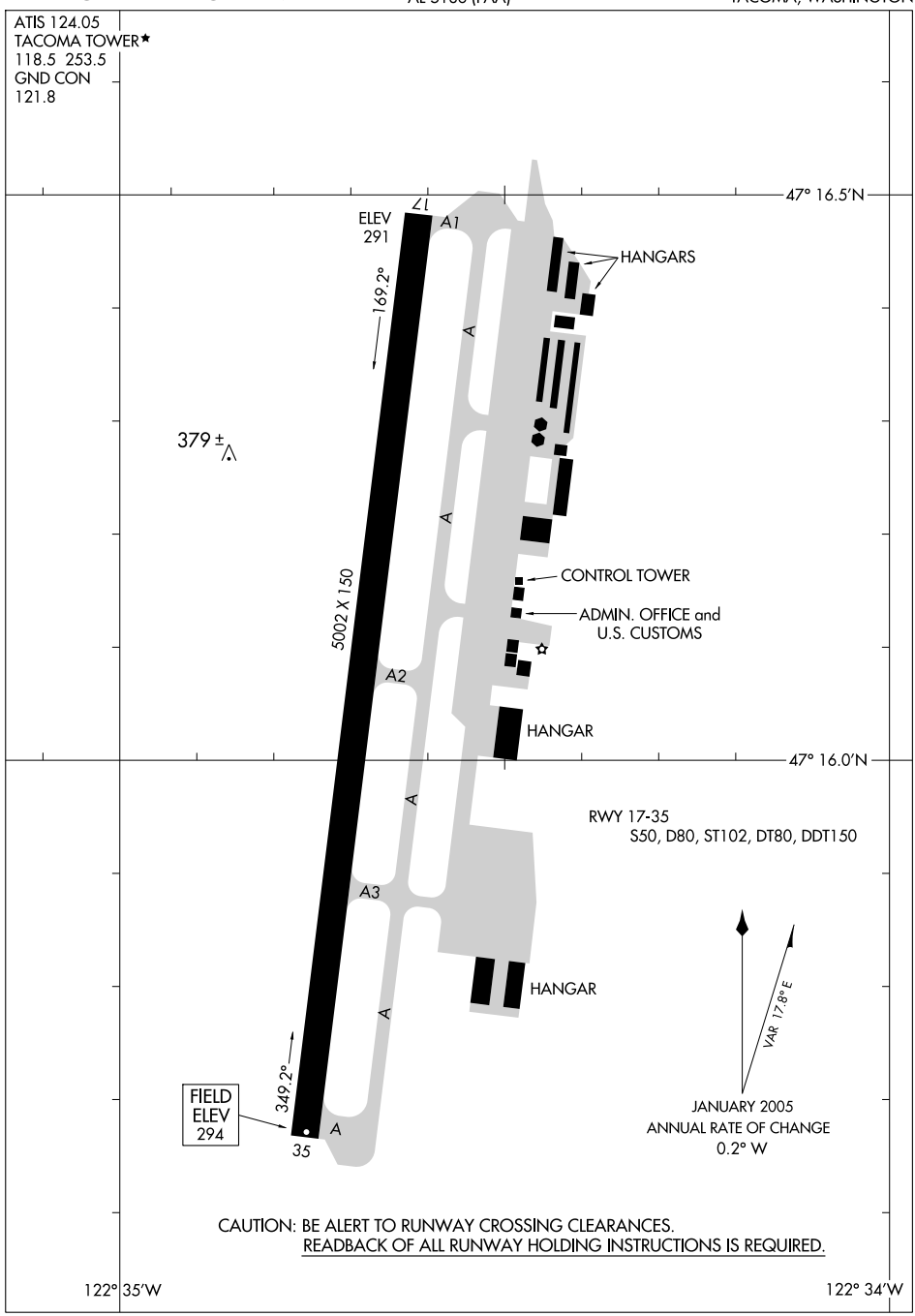
NOTE: Chart not to scale.

07074

AIRPORT DIAGRAM

AL-5186 (FAA)

TACOMA NARROWS (TIW)
TACOMA, WASHINGTON



NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-TIW	APP CRS	Rwy Idg	5002
109.1	167°	TDZE	292
		Apt Elev	292

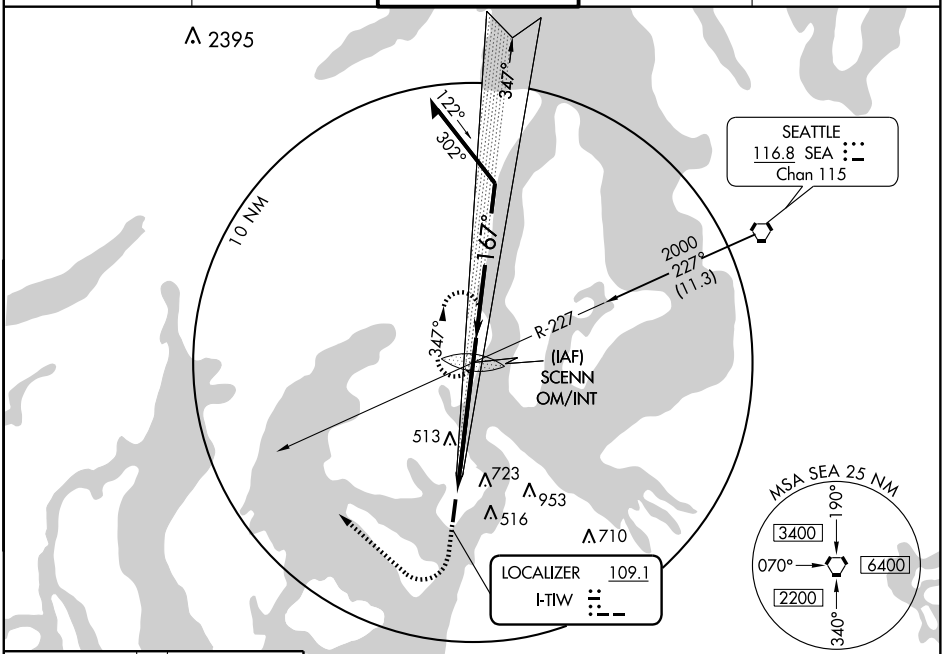
ILS RWY 17
TACOMA NARROWS (TIW)

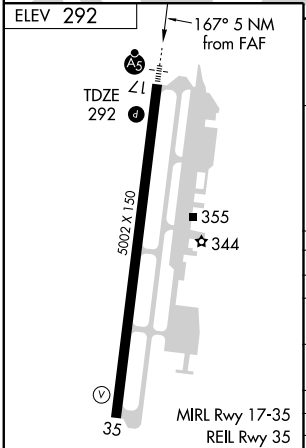
When control tower closed, obtain local altimeter setting on UNICOM, when not received, use McChord AFB altimeter setting minimums. Circling not authorized East of Rwy 17-35.

MALSR

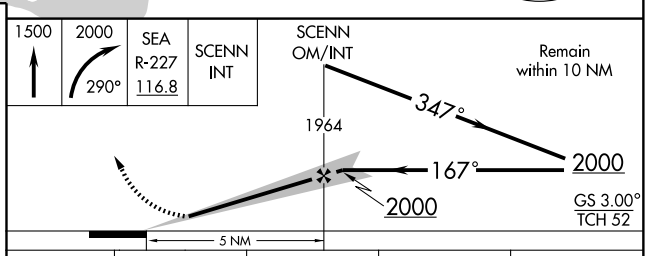
MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 via heading 290° and SEA VORTAC R-227 to SCENN INT and hold.

ATIS	SEATTLE APP CON	TACOMA TOWER ★	GND CON	UNICOM
124.05	120.1 290.9	118.5 (CTAF) L 253.5	121.8	122.95





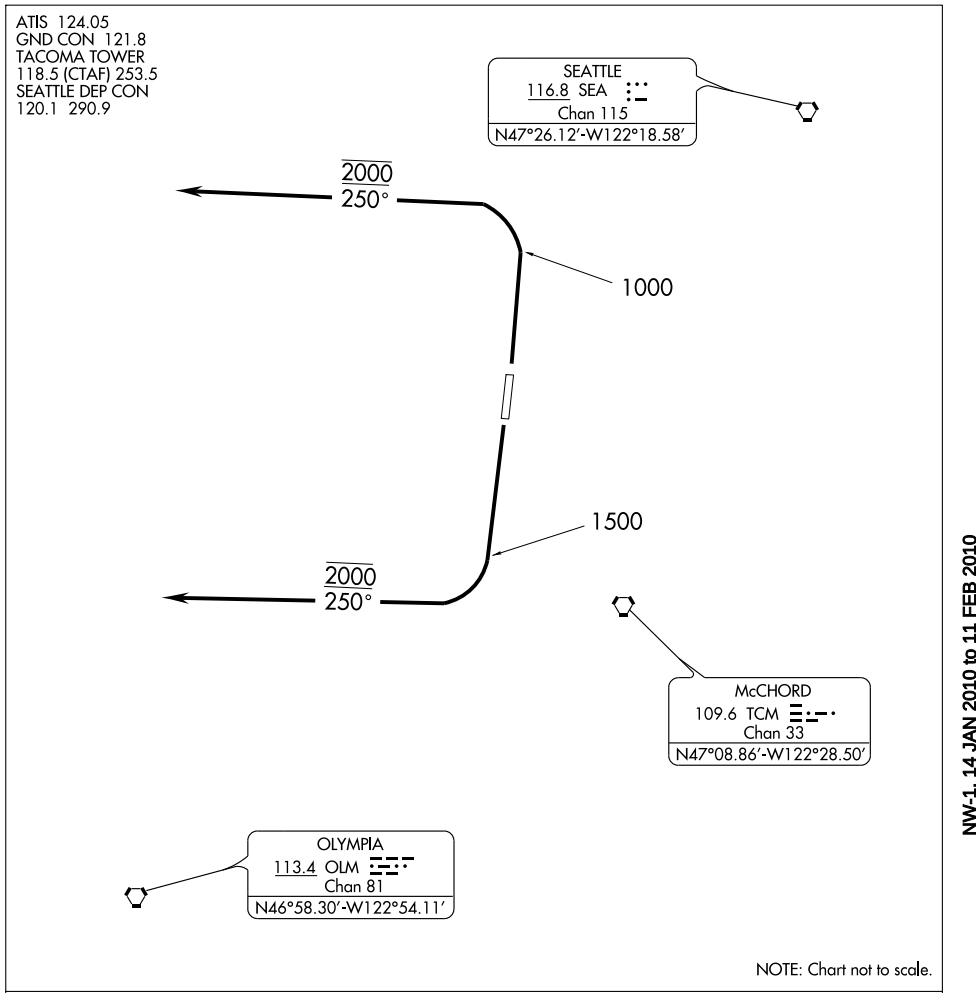
FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 17	492-½ 200 (200-½)			
S-LOC 17	760-½ 468 (500-½)		760-¾ 468 (500-¾)	760-1 468 (500-1)
CIRCLING	760-1 468 (500-1)		760-1½ 468 (500-1½)	860-2 568 (600-2)
McCHORD AFB ALTIMETER SETTING MINIMUMS				
S-ILS 17	517-½ 225 (300-½)			
S-LOC 17	780-½ 488 (500-½)		780-¾ 488 (500-¾)	780-1 488 (500-1)
CIRCLING	780-1 488 (500-1)		780-1½ 488 (500-1½)	860-2 568 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

NARROWS ONE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb runway heading until leaving 1500, turn right heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route

TAKE-OFF RUNWAY 35: Climb runway heading until leaving 1000, turn left heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route.

LOST COMMUNICATIONS: If no transmissions are received for 3 minutes after departure, climb to filed altitude direct SEA VORTAC, thence via assigned route.

LOM GR	APP CRS		
216	349°	Rwy Idg	5002
		TDZE	292
		Apt Elev	292

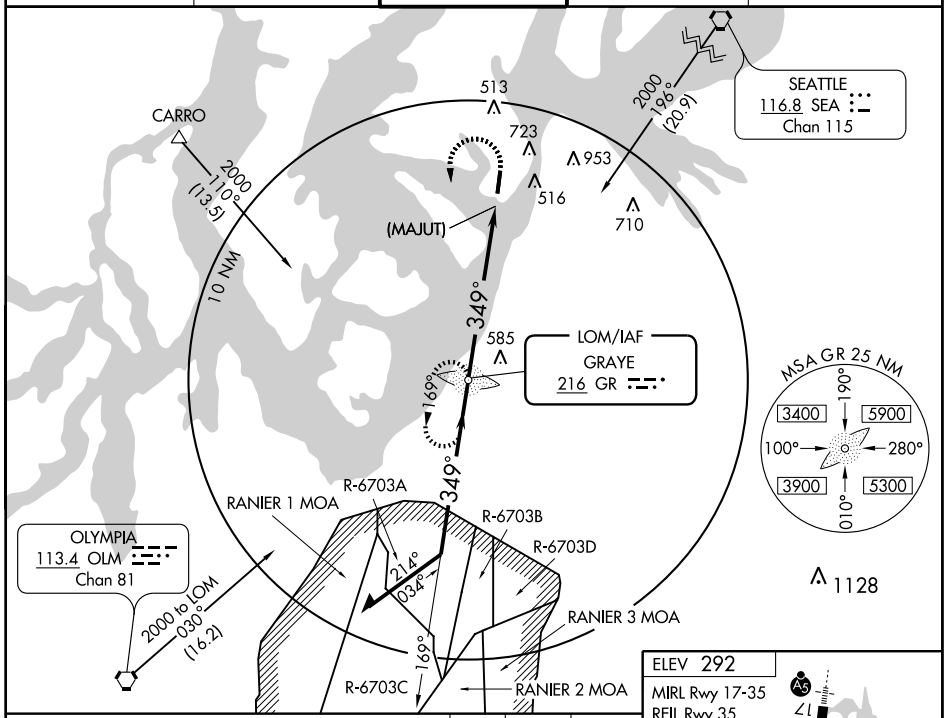
NDB RWY 35

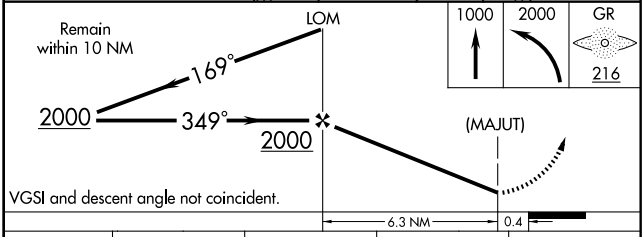
TACOMA NARROWS (TIW)

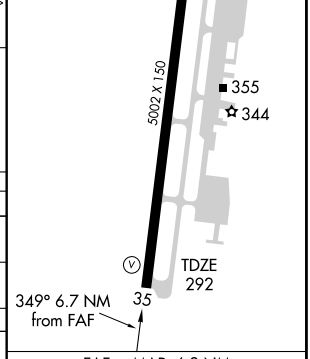
When control tower closed, obtain local altimeter setting on UNICOM; when not received, use McChord AFB altimeter setting. Circling not authorized East of Rwy 17-35.

MISSED APPROACH: Climb to 1000, then climbing left turn to 2000 direct GR LOM and hold.

ATIS	SEATTLE APP CON	TACOMA TOWER★	GND CON	UNICOM
124.05	120.1 290.9	118.5 (CTAF) L 253.5	121.8	122.95







CATEGORY	A	B	C	D
S-35	1000-1	708 (800-1)	1000-2 708 (800-2)	1000-2¼ 708 (800-2¼)
CIRCLING	1000-1	708 (800-1)	1000-2 708 (800-2)	1000-2¼ 708 (800-2¼)
McCHORD AFB ALTIMETER SETTING MINIMUMS				
S-35	1020-1	728 (800-1)	1020-2 728 (800-2)	1020-2¼ 728 (800-2¼)
CIRCLING	1020-1	728 (800-1)	1020-2 728 (800-2)	1020-2¼ 728 (800-2¼)

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	5002
CH 82608	167°	TDZE	294
W17A		Apt Elev	294

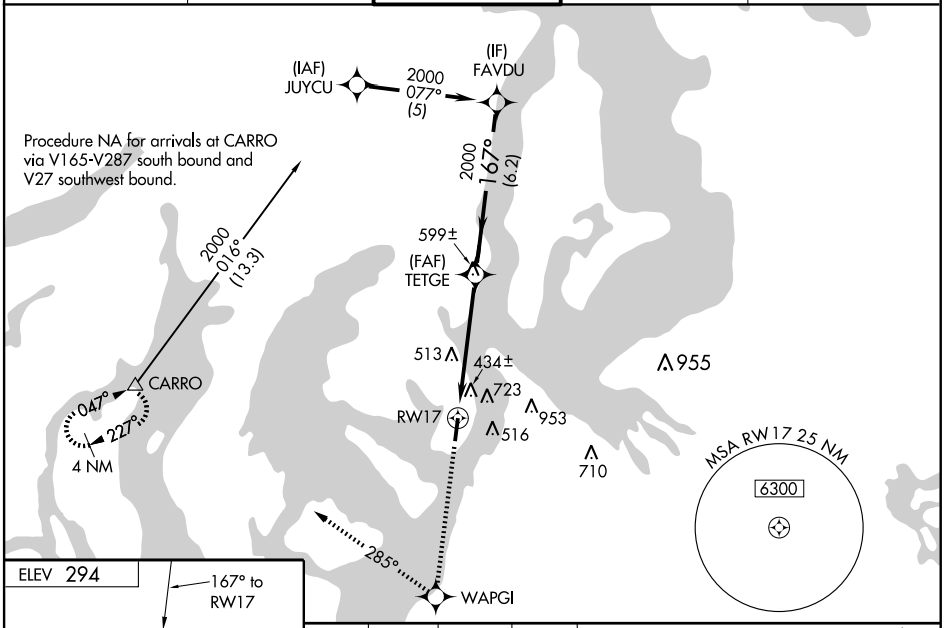
RNAV (GPS) RWY 17
TACOMA NARROWS (TIW)

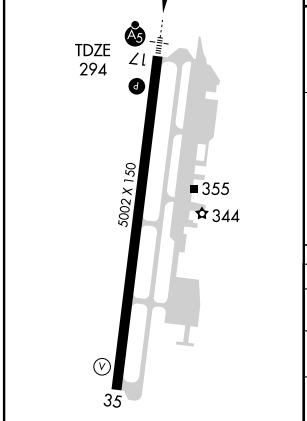
Inoperative table does not apply to LNAV Cats A and B.
Circling NA east of Rwy 17/35.
Baro-VNAV NA when using McChord AFB altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use McChord AFB altimeter setting and increase all DA/MDA 40 feet.

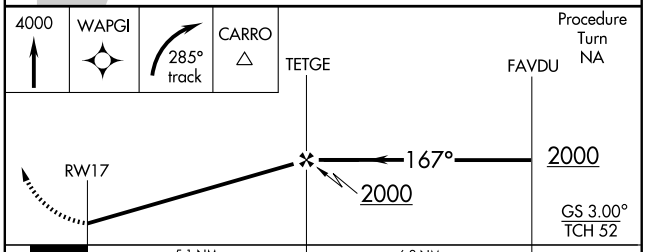
MALSR

MISSED APPROACH: Climb to 4000 direct WAPGI and right turn via 285° track to CARRO and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	TACOMA TOWER ★	GND CON	UNICOM
124.05	120.1 290.9	118.5 (CTAF) L 253.5	121.8	122.95







CATEGORY	A	B	C	D
LPV DA	638-1 344 (400-1)			
LNAV/VNAV DA	992-2 698 (700-2)			
LNAV MDA	980-1 686 (700-1)		980-1½ 686 (700-1½)	980-1¾ 686 (700-1¾)
CIRCLING	980-1 686 (700-1)		980-2 686 (700-2)	980-2¼ 686 (700-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

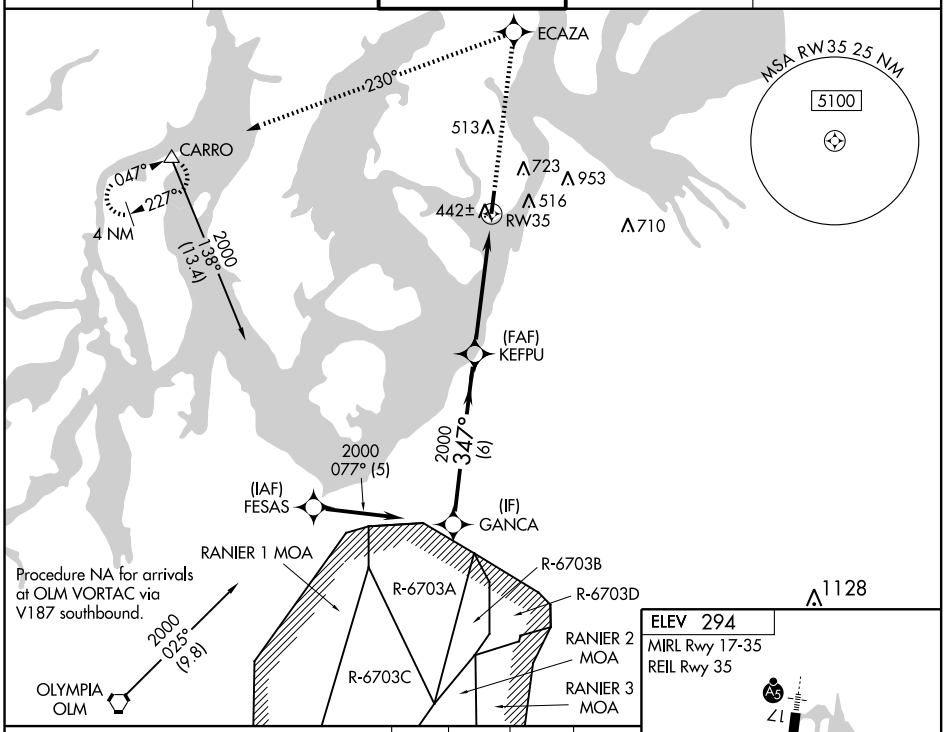
WAAS	APP CRS	Rwy Idg	5002
CH 50312	347°	TDZE	294
W35A		Apt Elev	294

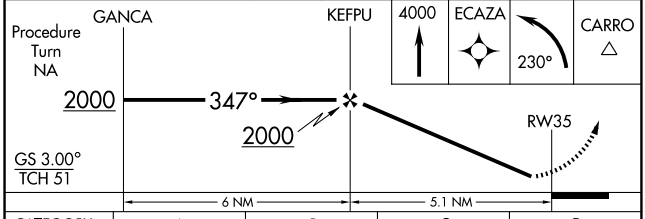
RNAV (GPS) RWY 35
TACOMA NARROWS (TIW)

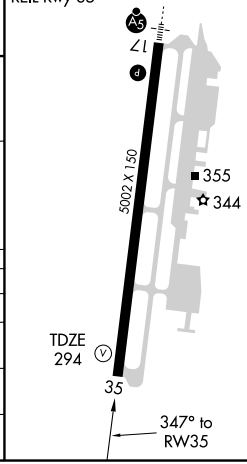
Baro-VNAV NA when using McChord AFB altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA. Circling NA east of Rwy 17-35.
When local altimeter setting not received, use McChord AFB altimeter setting and increase all DA 25 feet and all MDA 40 feet.

MISSED APPROACH: Climb to 4000 direct ECAZA and left turn via 230° track to CARRO and hold, continue climb-in-hold to 4000.

ATIS	SEATTLE APP CON	TACOMA TOWER ★	GND CON	UNICOM
124.05	120.1 290.9	118.5 (CTAF) L 253.5	121.8	122.95







CATEGORY	A	B	C	D
LPV DA	560-1 266 (300-1)			
LNAV/VNAV DA	768-1¾ 474 (500-1¾)			
LNAV MDA	840-1 546 (600-1)		840-1½ 546 (600-1½)	840-1¾ 546 (600-1¾)
CIRCLING	980-1 686 (700-1)		980-2 686 (700-2)	980-2¼ 686 (700-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-VDG	APP CRS	Rwy Idg	N/A
111.3	099°	TDZE	N/A
Chan 50		Apt Elev	25

LDA-A

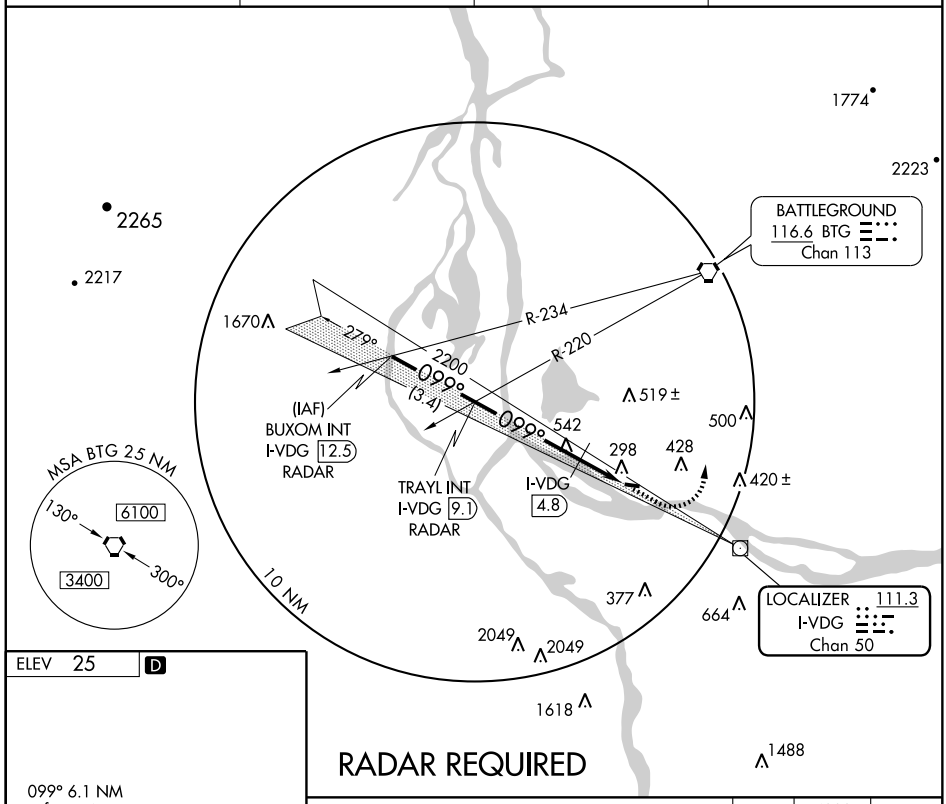
VANCOUVER/PEARSON FIELD (VUO)

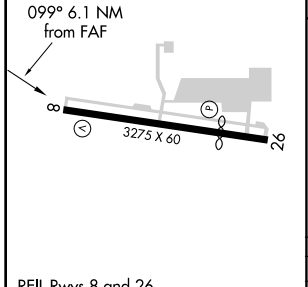
T
NA

Use Portland Intl altimeter setting.

MISSED APPROACH: Climb to 900 then climbing left turn to 4000 direct to BTG VORTAC.

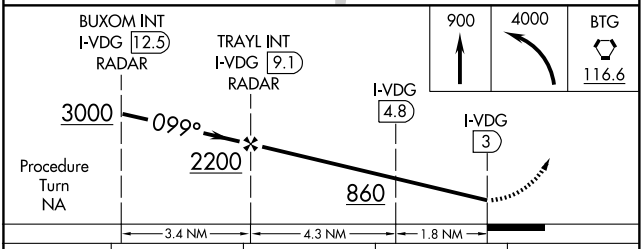
ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
135.125	124.35 299.2	121.65	123.0 (CTAF) L





REIL Rwys 8 and 26
MIRL Rwy 8-26 L

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02



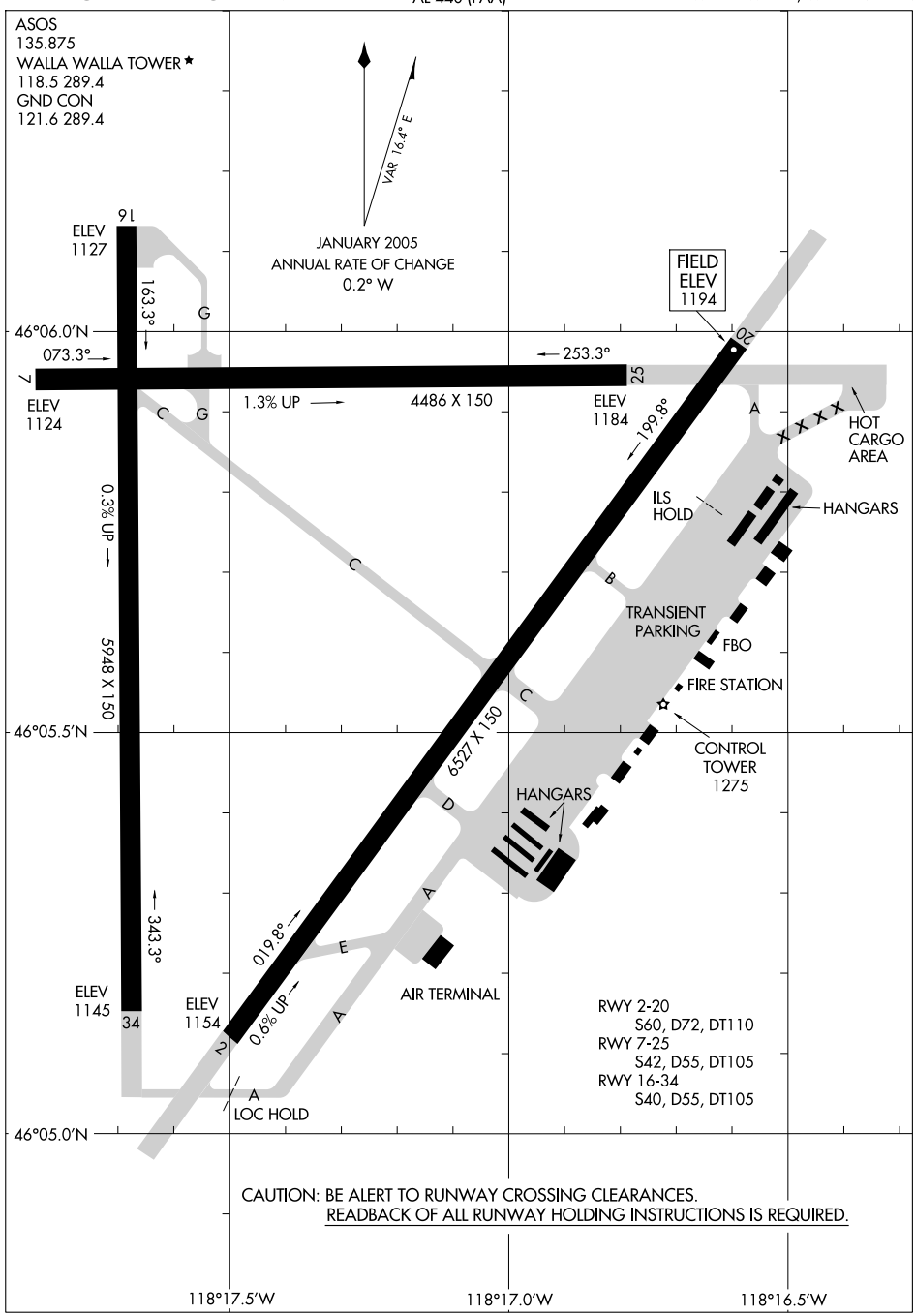
CATEGORY	A	B	C	D
CIRCLING	860-1 835 (900-1)	860-1¼ 835 (900-1¼)	NA	
DME MINIMUMS				
CIRCLING	660-1 635 (700-1)	720-1 695 (700-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-440 (FAA)

WALLA WALLA RGNL (ALW)
WALLA WALLA, WASHINGTON



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-ALW	APP CRS	Rwy Idg	6527
111.7	196°	TDZE	1194
		Apt Elev	1194

ILS or LOC RWY 20

WALLA WALLA RGNL (ALW)

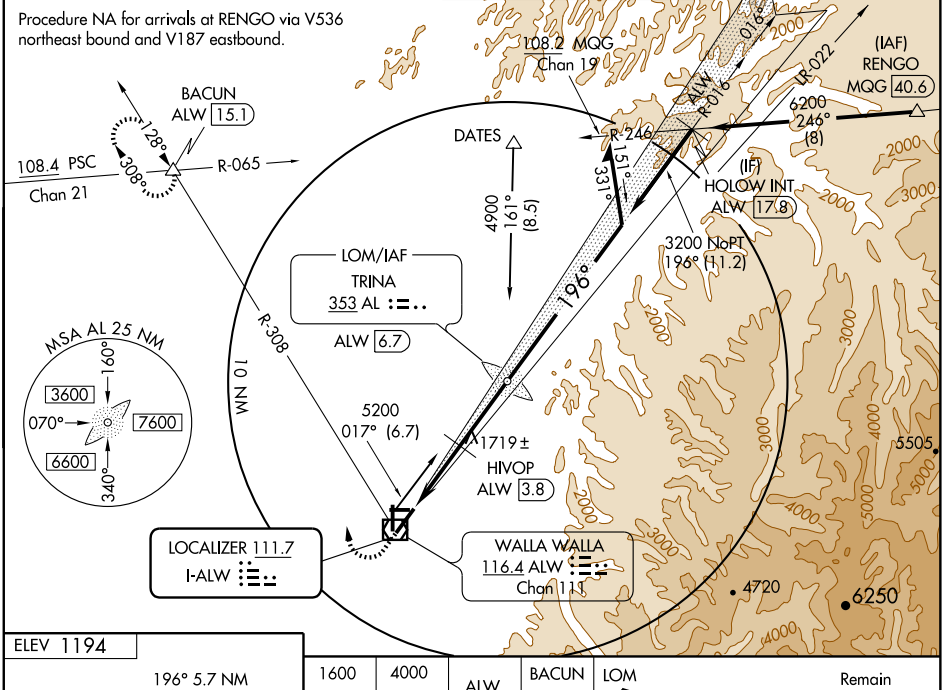
RVR 1800 authorized with the use of FD or AP or HUD to DA.

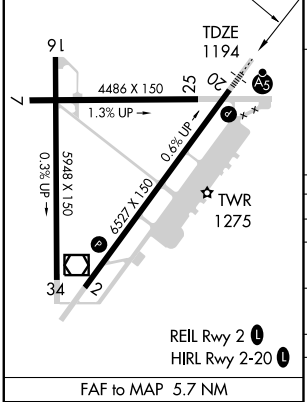
MALSR

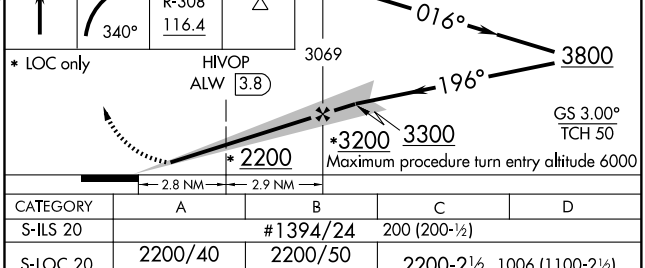
MISSED APPROACH: Climb to 1600 then climbing right turn to 4000 heading 340° and ALW R-308 to BACUN INT/ALW 15.1 DME and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4

Procedure NA for arrivals at RENGO via V536 northeast bound and V187 eastbound.







CATEGORY	A	B	C	D
S-ILS 20	#1394/24		200 (200-½)	
S-LOC 20	2200/40 1006 (1100-¾)	2200/50 1006 (1100-1)	2200-2½	1006 (1100-2½)
CIRCLING	2200-1¼ 1006 (1100-1¼)	2200-1½ 1006 (1100-1½)	2200-3	1006 (1100-3)
DME MINIMUMS				
S-LOC 20	1980/24 786 (800-½)	1980/40 786 (800-¾)	1980-1¾ 786 (800-1¾)	1980-2 786 (800-2)
CIRCLING	1980-1 786 (800-1)	1980-1¼ 786 (800-1¼)	1980-2¼ 786 (800-2¼)	1980-2½ 786 (800-2½)

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM AL	APP CRS	Rwy Idg	6527
353	196°	TDZE	1194
		Apt Elev	1194

NDB RWY 20

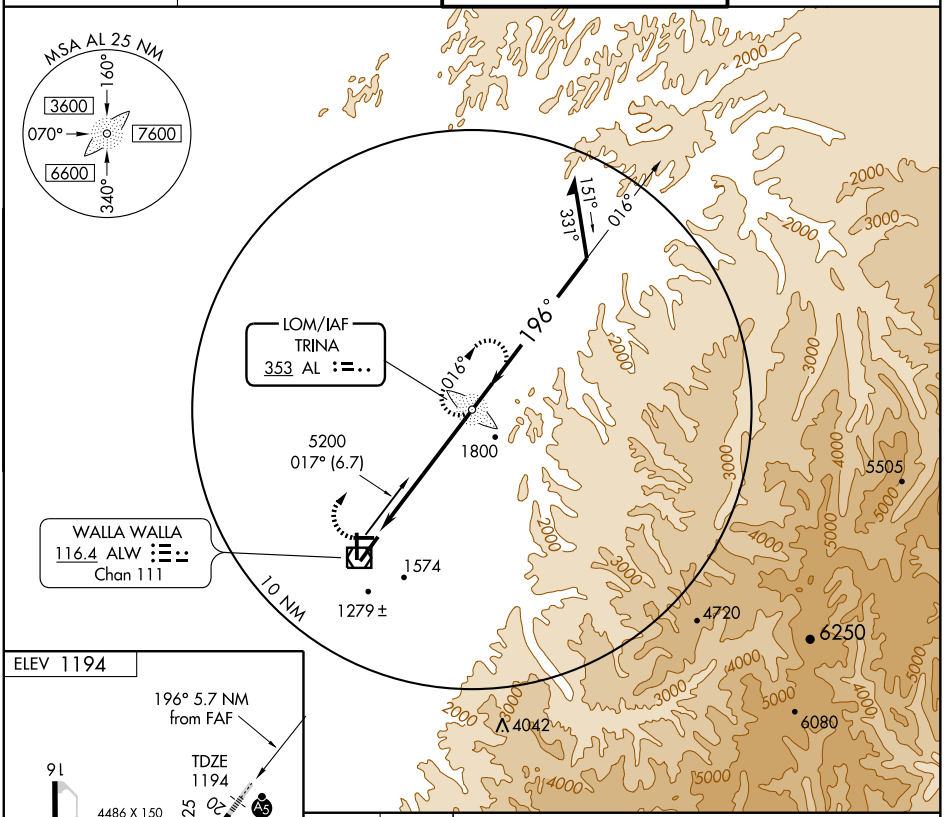
WALLA WALLA RGNL (ALW)

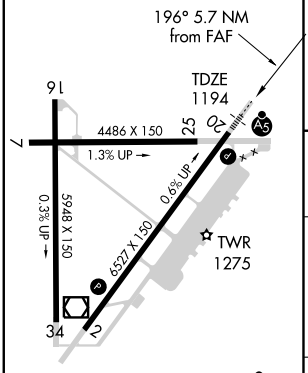
Cat. A and B S-20 visibility increased ½ mile for inoperative ALSF-1.

MALSR

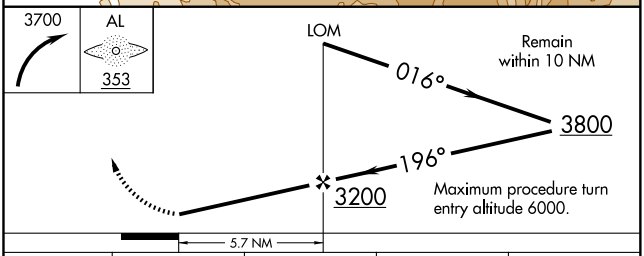
MISSED APPROACH: Climbing right turn to 3700 direct TRINA LOM and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4





FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



CATEGORY	A	B	C	D
S-20	2200/40 1006 (1100-¾)	2200/50 1006 (1100-1)	2200-2½ 1006 (1100-2½)	2200-2¾ 1006 (1100-2¾)
CIRCLING	2200-1¼ 1006 (1100-1¼)	2200-1½ 1006 (1100-1½)	2200-3 1006 (1100-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 72805 W02A	APP CRS 016°	Rwy Idg 6527 TDZE 1173 Apt Elev 1194

RNAV (GPS) RWY 2

WALLA WALLA RGNL (ALW)

DME/DME RNP- 0.3 NA.

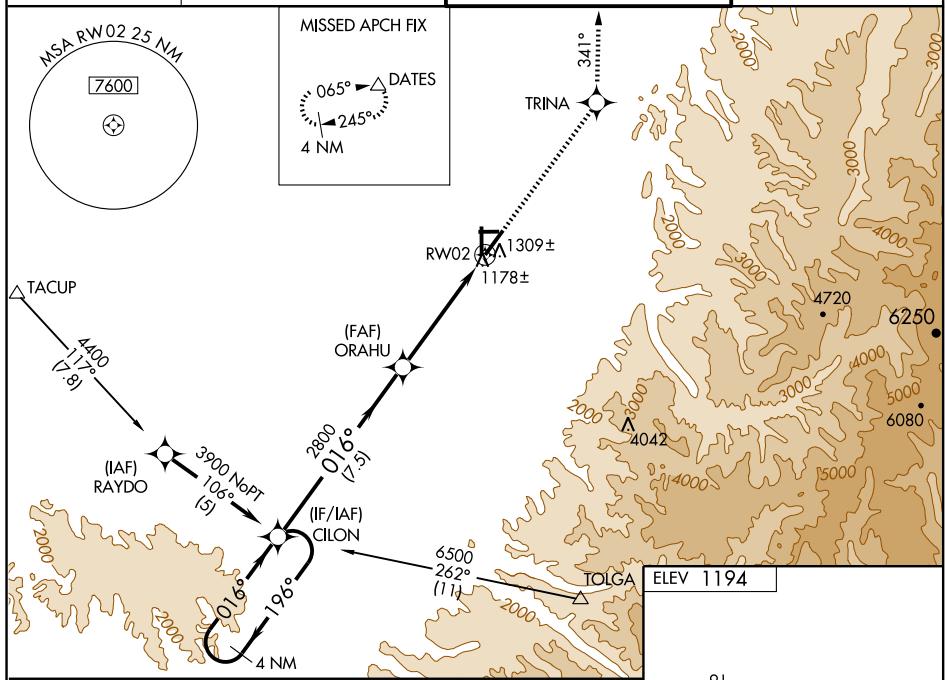
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).

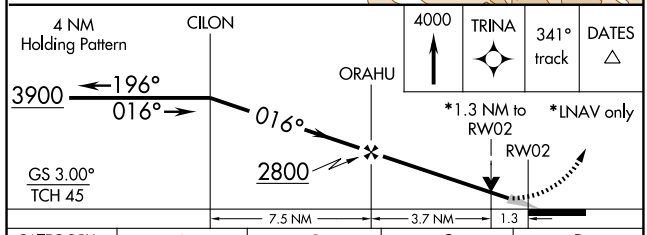
When local altimeter setting not received, use Pendleton altimeter setting and increase all DAs/MDAs 120 feet and LPV visibilities ¼ mile, LNAV/VNAV visibilities ½ mile, LNAV Cats. C/D visibility ¼ mile, and Circling Cat. C/D visibility ½ mile.

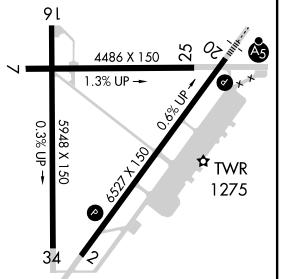
VDP and Baro-VNAV NA when using Pendleton altimeter setting.

MISSED APPROACH: Climb to 4000 direct TRINA and via 341° track to DATES and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4







CATEGORY	A	B	C	D
LPV DA	1423-1 250 (300-1)			
LNAV/VNAV DA	1612-1½ 439 (500-1½)			
LNAV MDA	1620-1 447 (500-1)		1620-1¼ 447 (500-1¼)	1620-1½ 447 (500-1½)
CIRCLING	1760-1 566 (600-1)		1820-1¾ 626 (700-1¾)	1980-2½ 786 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5948
160°	TDZE	1136
	Apt Elev	1191

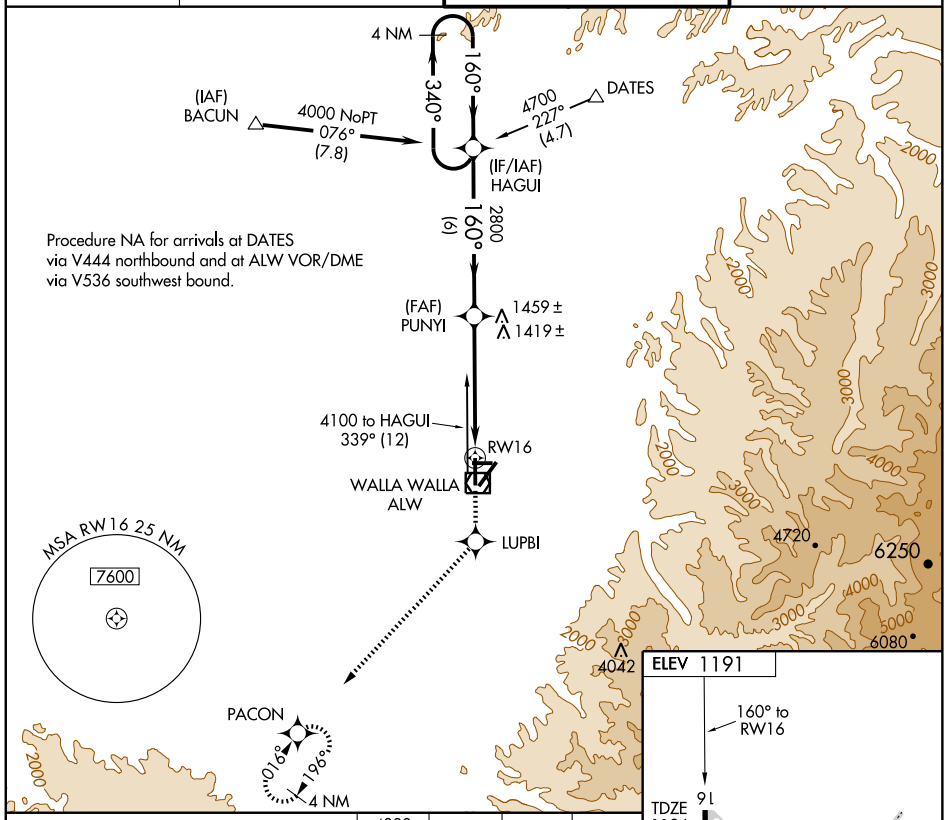
RNAV (GPS) RWY 16

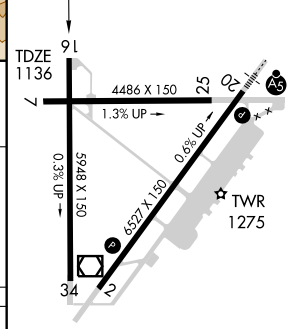
WALLA WALLA RGNL (ALW)

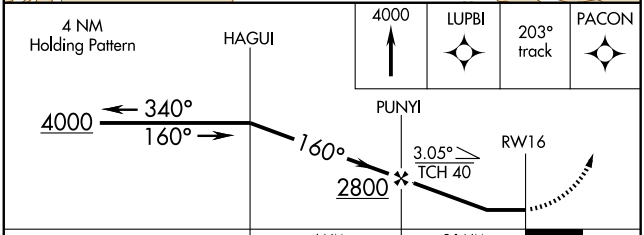
Straight-in/circling to Rwy 16 NA at night.
DME/DME RNP-0.3 NA.
Inoperative table does not apply.

MISSED APPROACH: Climb to 4000 direct LUPBI and via 203° track to PACON and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4







CATEGORY	A	B	C	D
LNAV MDA	1660-1	524 (600-1)	1660-1½ 524 (600-1½)	1660-1¾ 524 (600-1¾)
CIRCLING	1760-1	569 (600-1)	1820-1¾ 629 (700-1¾)	1980-2½ 789 (800-2½)

REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 90299 W20A	APP CRS 196°	Rwy Idg 6527 TDZE 1194 Apt Elev 1194

RNAV (GPS) RWY 20

WALLA WALLA RGNL (ALW)

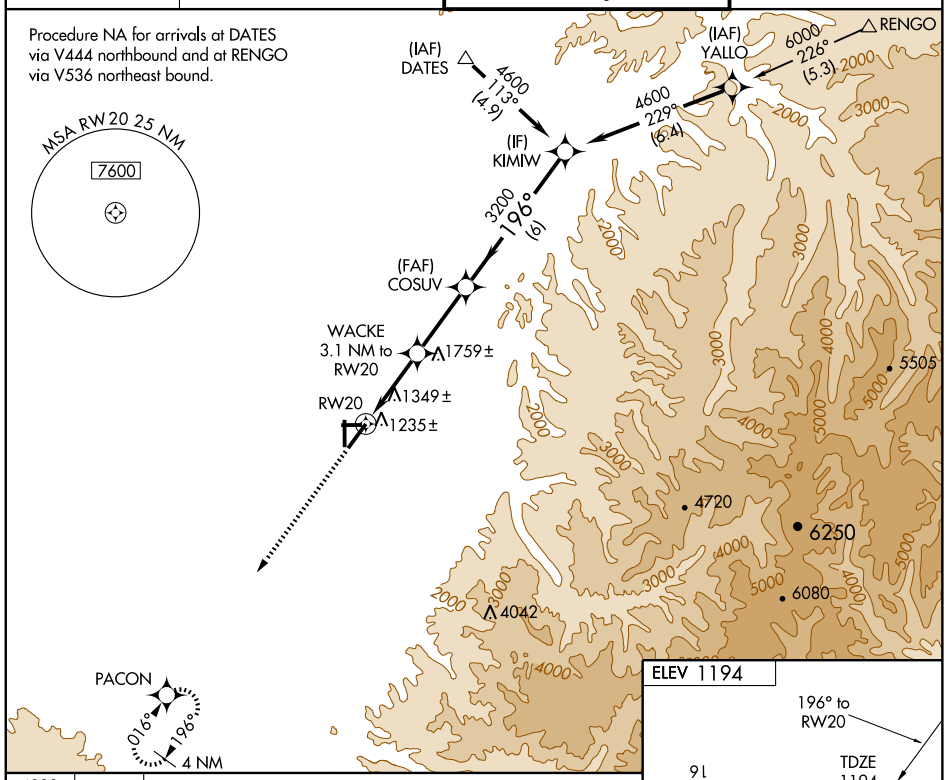
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -17°C (2°F).
For inoperative MALSR, increase LPV visibility all Cats to RVR 4000.

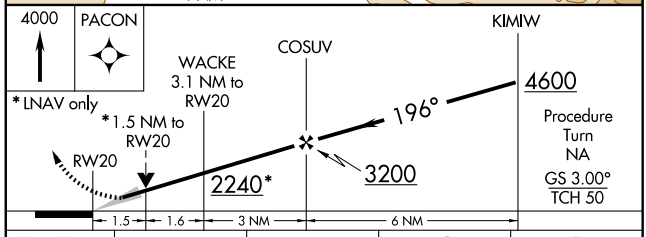
MALSR

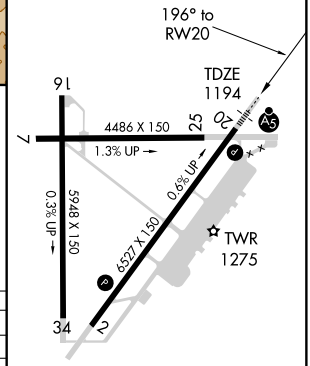
MISSED APPROACH: Climb to 4000 direct PACON and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4

Procedure NA for arrivals at DATES via V444 northbound and at RENGO via V536 northeast bound.







CATEGORY	A	B	C	D
LPV DA	1444/24 250 (300-½)			
LNAV/VNAV DA	1694/60 500 (500-1¼)			
LNAV MDA	1720/24 526 (600-½)		1720/50 526 (600-1)	1720/60 526 (600-1¼)
CIRCLING	1760-1¾ 566 (600-1¾)		1820-1¾ 626 (700-1¾)	1980-2½ 786 (800-2½)

REIL Rwy 2 L
HIRL Rwy 2-20 L

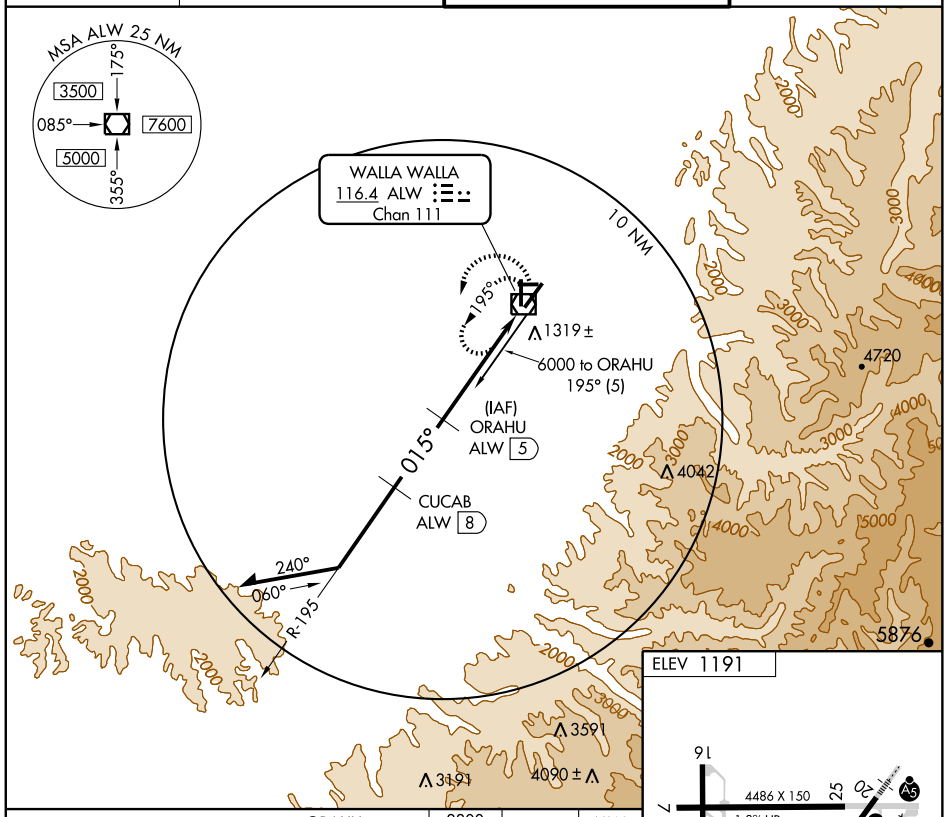
NW-1, 14 JAN 2010 to 11 FEB 2010

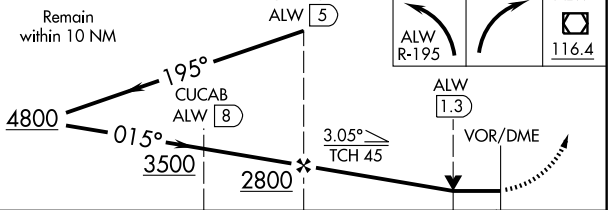
VOR/DME ALW	APP CRS	Rwy Idg	6527
116.4	015°	TDZE	1175
Chan 111		Apt Elev	1191

VOR/DME RWY 2
WALLA WALLA RGNL (ALW)

MISSED APPROACH: Climbing left turn to 3300 via ALW VOR/DME R-195 within 10 DME then turn right direct ALW VOR/DME and hold.

ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4





CATEGORY	A	B	C	D
S-2	1580-1	405 (400-1)	1580-1¼	405 (400-1¼)
CIRCLING	1760-1	569 (600-1)	1820-1¾ 629 (700-1¾)	1980-2½ 789 (800-2½)

REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME ALW	APP CRS	Rwy Idg	5948
116.4	154°	TDZE	1136
Chan 111		Apt Elev	1191

VOR RWY 16
WALLA WALLA RGNL (ALW)

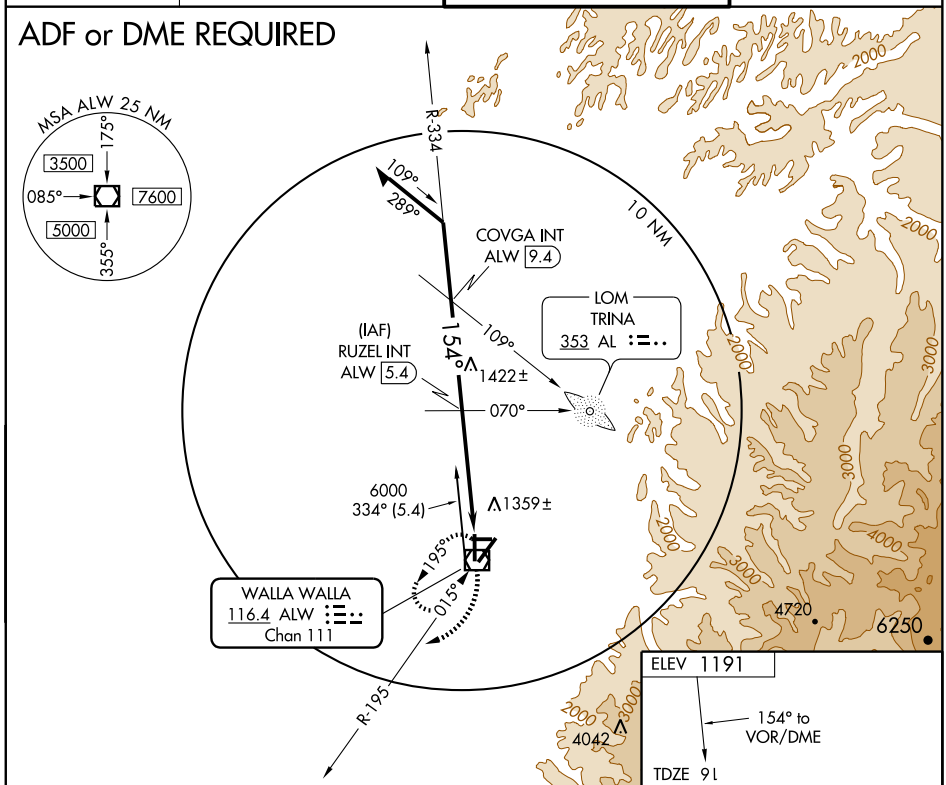
Straight-in/circling to Rwy 16 NA at night.
Inoperative table does not apply.

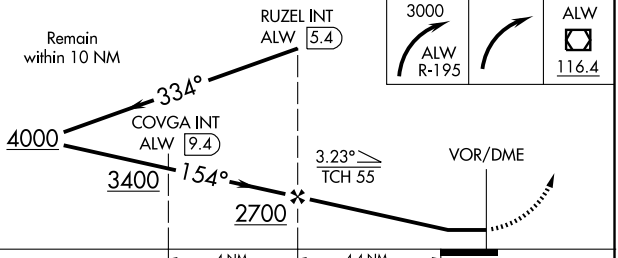
NA

MISSED APPROACH: Climbing right turn to 3000 via ALW VOR/DME R-195 within 10 DME then right turn direct ALW VOR/DME and hold.

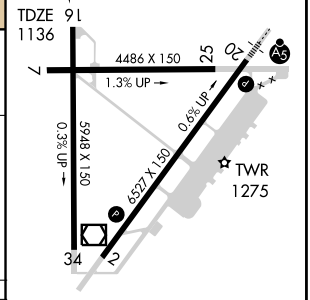
ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4

ADF or DME REQUIRED





CATEGORY	A	B	C	D
S-16	1620-1	484 (500-1)	1620-1¼ 484 (500-1¼)	1620-1½ 484 (500-1½)
CIRCLING	1760-1	569 (600-1)	1820-1¾ 629 (700-1¾)	1980-2½ 789 (800-2½)

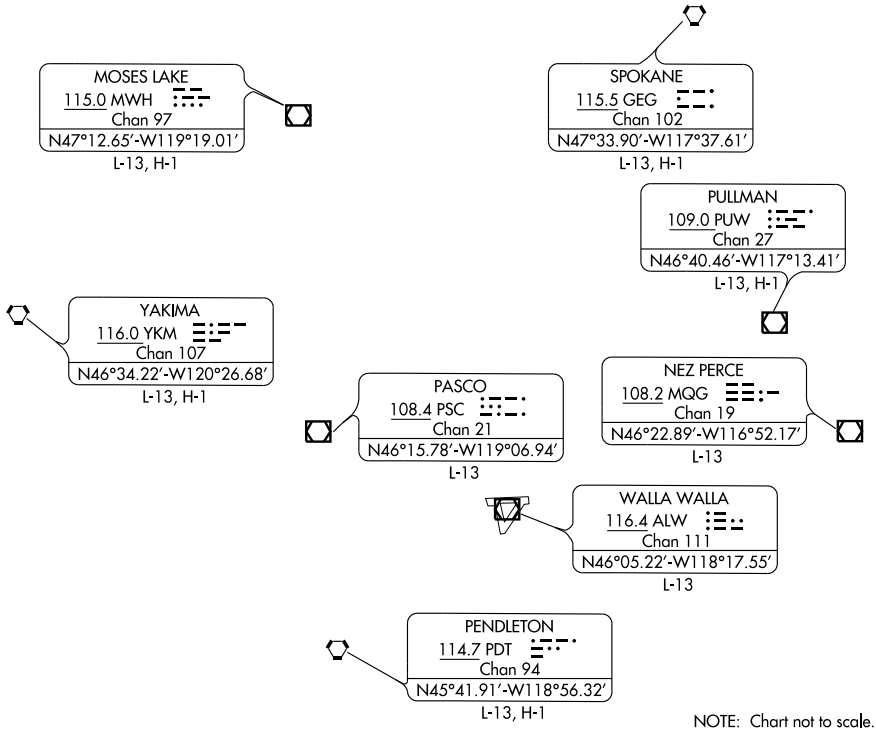


REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WALLA WALLA ONE DEPARTURE SL-440 (FAA)

WALLA WALLA GND CON
121.6 289.4
WALLA WALLA TOWER ★
118.5 (CTAF) 289.4
CHINOOK APP CON ★
133.15 379.15



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via specified turn and heading for vector to assigned route.
LOST COMMUNICATIONS: If not in contact with Departure Control after reaching 2500′ continue climb to assigned altitude and proceed direct to ALW VOR/DME, thence via assigned route.
Note: Air Traffic Control may assign turns and magnetic headings of 195° clockwise through 020° in the initial clearance.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-ADJ	APP CRS	Rwy Idg	5700
109.35	116°	TDZE	1226
Chan 30 (Y)		Apt Elev	1249

ILS Y RWY 12

WENATCHEE/ PANGBORN MEMORIAL (EAT)

When VGSI inoperative, procedure NA at night.

MISSED APPROACH: Climb to 4000 direct EAT VOR/DME and via EAT R-113 to QUINT INT/EAT 16.6 DME and hold.

ASOS	SEATTLE CENTER	UNICOM
119.925	126.1 291.6	123.0 (CTAF) L

DME REQUIRED

2710 ± ∧

MSA EAT 25 NM

180° 5500 10700 270° 7800 360°

MISSED APCH FIX

111.0 EAT R-113 Chan 47 — QUINT EAT 16.6

115.0 MWH Chan 97 — R-253 — 113° — R-223 — 293°

112.6 EPH Chan 73

(IF) ZARLO 19.9 I-ADJ

7900 EAT 19 Arc

YOYUG EAT 19

VECUS I-ADJ 15

UBIYO I-ADJ 12.4

6500 14.9 116° 3000 4000 2000 IR 290 5700 12.6 116° 2000

9100 EAT 19 Arc

R-281

3505 ± ∧

3605

LOCALIZER 109.35 I-ADJ Chan 30(Y)

4766

4621

R-253

(IAF) WINIM EAT 19

2070 ∧

WENATCHEE 111.0 EAT Chan 47

3369 ∧

3874 ±

6880

10 NM

R-113

5870

4254

5810

ELEV 1249 D

116°

1292

TDZE 1226

1276

5700 X 150

4460 X 75

1.0% UP

1258 ±

ZARLO I-ADJ 19.9 — VECUS I-ADJ 15 — UBIYO I-ADJ 12.4

7900 — 116° — 6500 — 5700 — 5700

Procedure Turn NA

GS 3.60°

TCH 46

4.9 NM — 2.6 NM — 11.3 NM

4000	EAT 111.0	EAT R-113 111.0	QUINT

Use I-ADJ DME when on the localizer course.

VGSI and ILS glidepath not coincident.

CATEGORY	A	B	C	D
S-ILS 12	2539-4 1313 (1300-4)			NA
CIRCLING	NA			

RAIL Rwy 30

REIL Rwys 12 and 30 L

MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME EAT	APP CRS	Rwy Idg	N/A
111.0	285°	TDZE	N/A
Chan 47		Apt Elev	1249

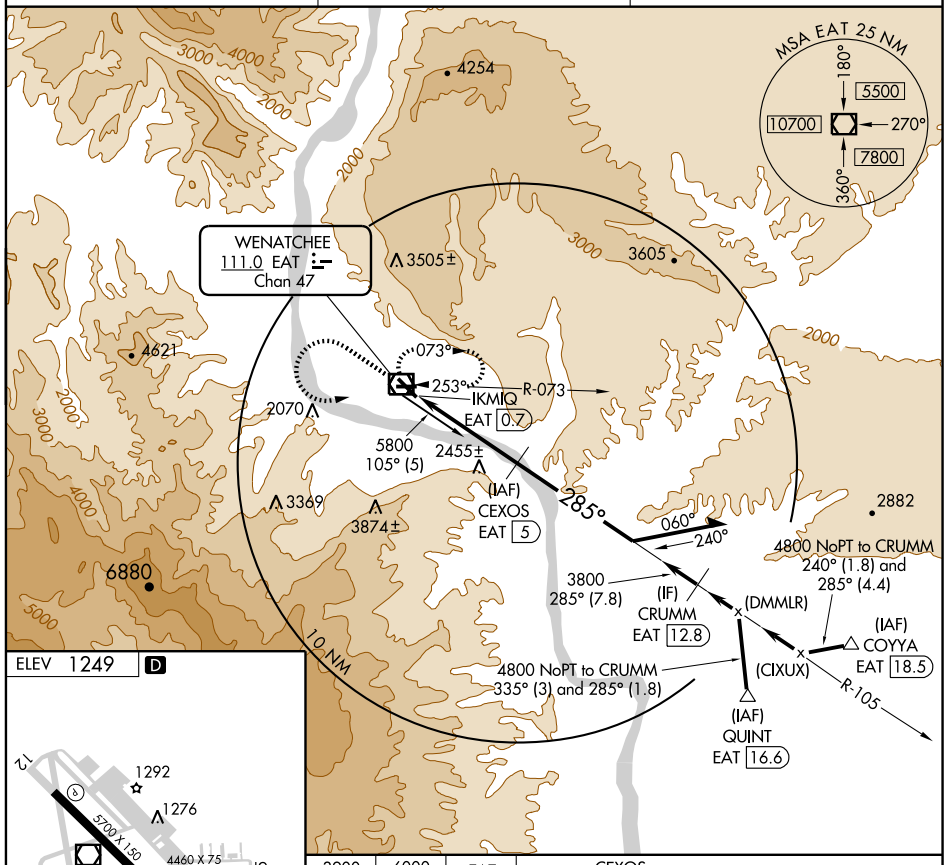
VOR/DME-A

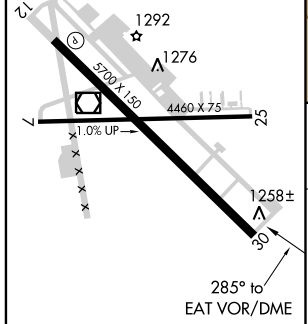
WENATCHEE/PANGBORN MEMORIAL (EAT)

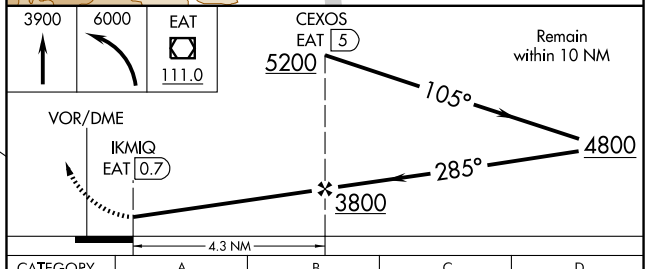
Circling NA northeast of Rwy 12-30.
When local altimeter setting not received, use Ephrata altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 3900 then climbing left turn to 6000 direct EAT VOR/DME and hold, continue climb-in-hold to 6000.

ASOS	SEATTLE CENTER	UNICOM
119.925	126.1 291.6	123.0 (CTAF) L







RAIL Rwy 30
REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
CIRCLING	3180-1¼ 1931 (2000-1¼)	3180-1½ 1931 (2000-1½)	3180-3 1931 (2000-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME EAT	APP CRS	Rwy Idg	N/A
111.0	100°	TDZE	N/A
Chan 47		Apt Elev	1249

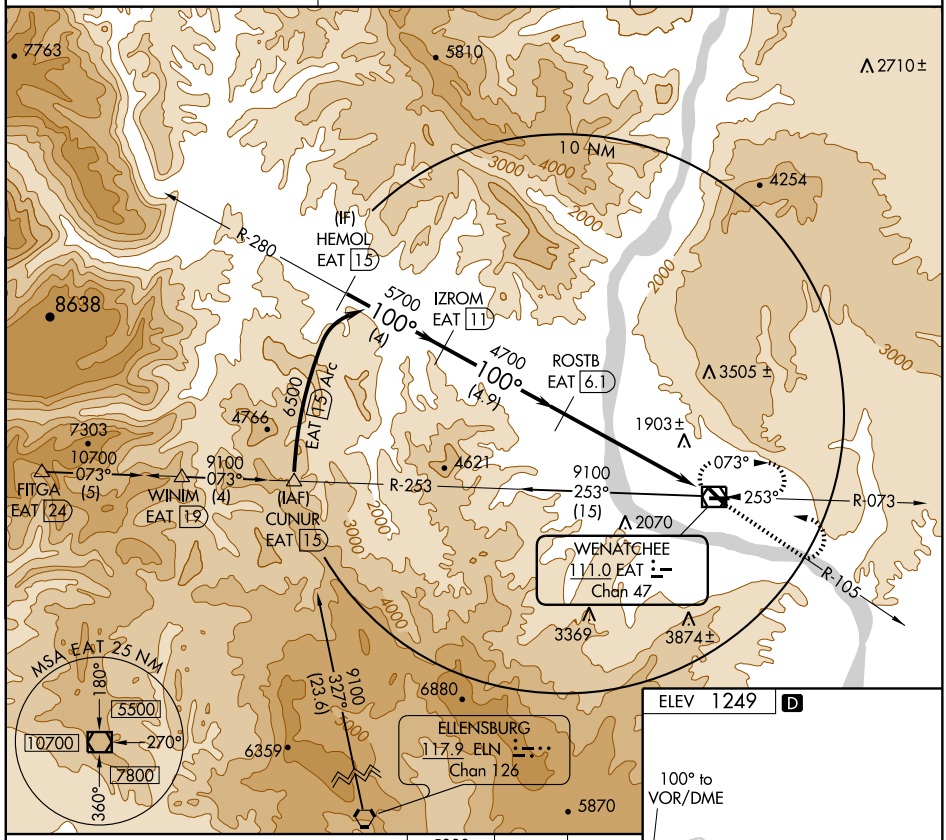
VOR/DME-C

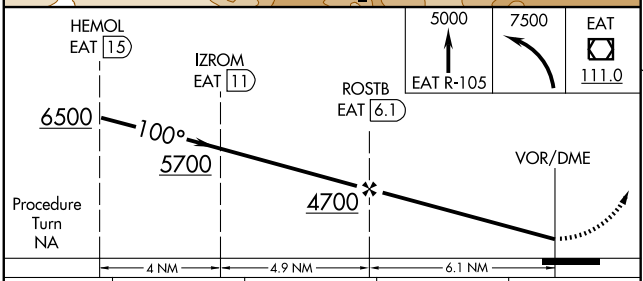
WENATCHEE /PANGBORN MEMORIAL (EAT)

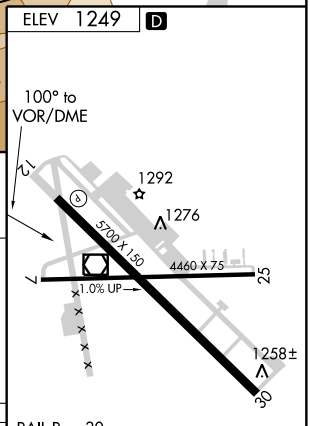
Circling NA northeast of Rwy 12-30.
When local altimeter setting not received, use Ephrata altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 5000 via EAT VOR/DME R-105 then climbing left turn to 7500 direct EAT VOR/DME and hold, continue climb-in-hold to 7500.

ASOS	SEATTLE CENTER	UNICOM
119.925	126.1 291.6	123.0 (CTAF) L



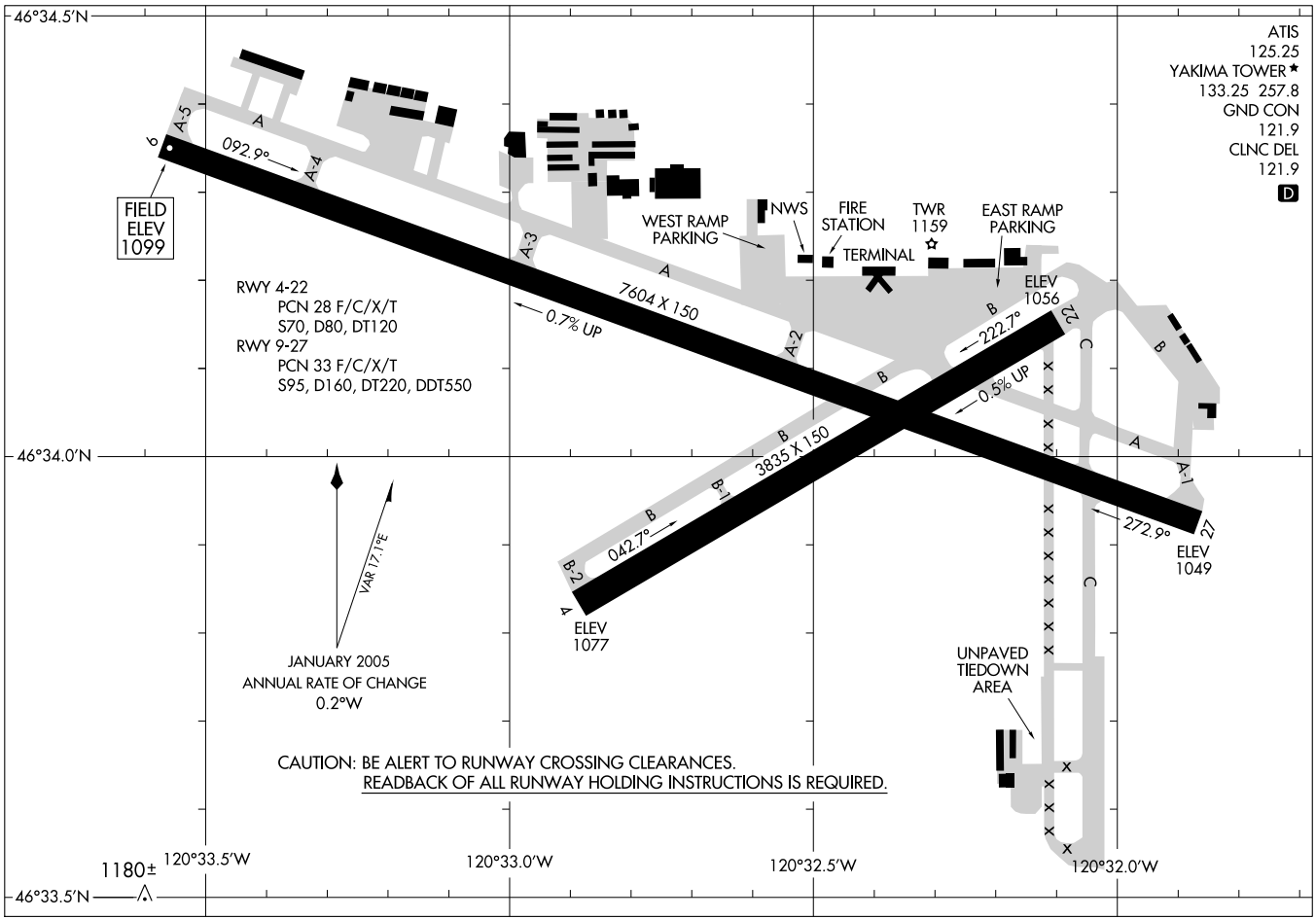




CATEGORY	A	B	C	D
CIRCLING	2660-1¼ 1411 (1500-1¼)	2660-1½ 1411 (1500-1½)	2660-3 1411 (1500-3)	

RAIL Rwy 30
REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010


AIRPORT DIAGRAM
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
YAKIMA, WASHINGTON
AL-465 (FAA)
ATIS
125.25
YAKIMA TOWER ★
133.25 257.8
GND CON
121.9
CLNC DEL
121.9
D
FIELD ELEV 1099
092.9°
RWY 4-22
PCN 28 F/C/X/T
S70, D80, DT120
RWY 9-27
PCN 33 F/C/X/T
S95, D160, DT220, DDT550
7604 X 150
0.7% UP
222.7°
0.5% UP
3835 X 150
042.7°
272.9°
ELEV 1056
ELEV 1049
ELEV 1077
WEST RAMP PARKING
NWS
FIRE STATION
TWR 1159
TERMINAL
EAST RAMP PARKING
UNPAVED TIEDOWN AREA
VAR 17.1°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.2°W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
1180±
46°34.5'N
46°34.0'N
46°33.5'N
120°33.5'W
120°33.0'W
120°32.5'W
120°32.0'W

COPTER NDB 269°

LOM YK 371	APCH CRS 269°	Rwy ldg 7603 / TDZE 1065 / Arpt Elev 1095

AL-465 [USA]

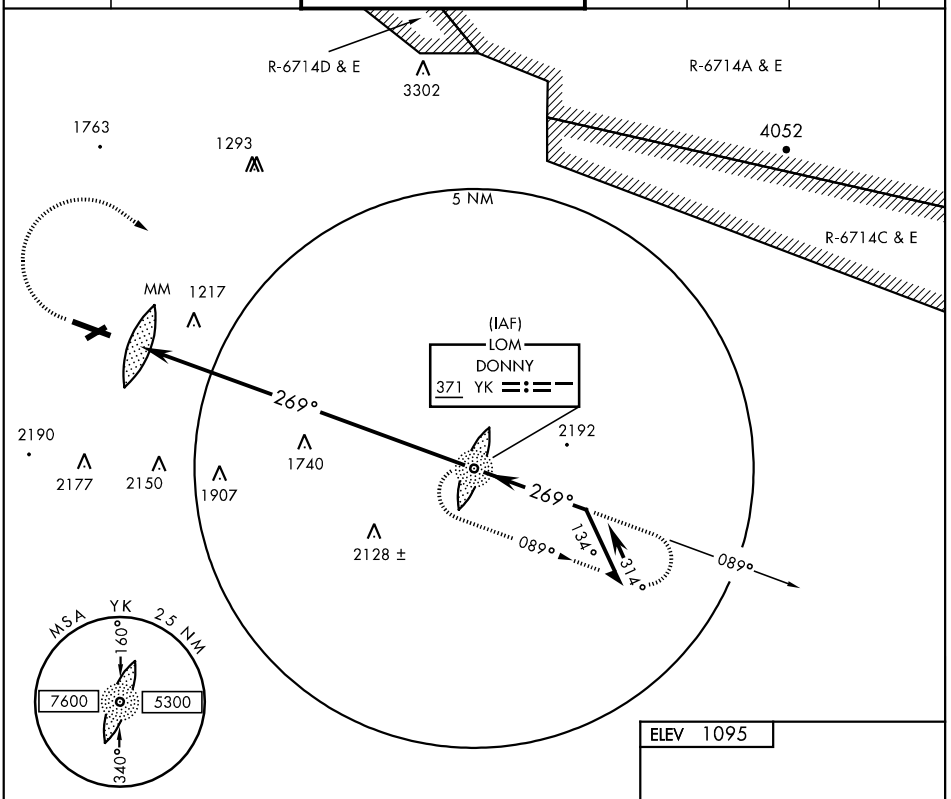
YAKIMA AIR TERMINAL/ MC ALLISTER FLD (KYKM)

NA

MALSR

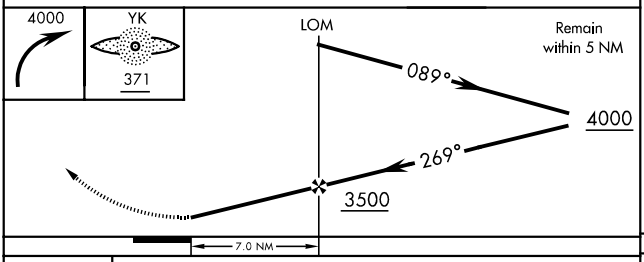
MISSED APROACH: Climbing right turn to 4000 direct DONNY LOM and hold.

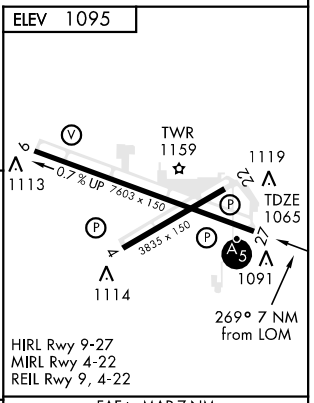
ATIS ★	CHINOOK APP CON	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM	ASOS
125.25	123.8 263.15	133.25 (CTAF) 257.8	121.9	121.9	122.95	



NW-1, 14 JAN 2010 to 11 FEB 2010

COPTER ONLY





CATEGORY	COPTER		
H-269°	2460-¾	1395	(1400-¾)

FAF to MAP 7 NM

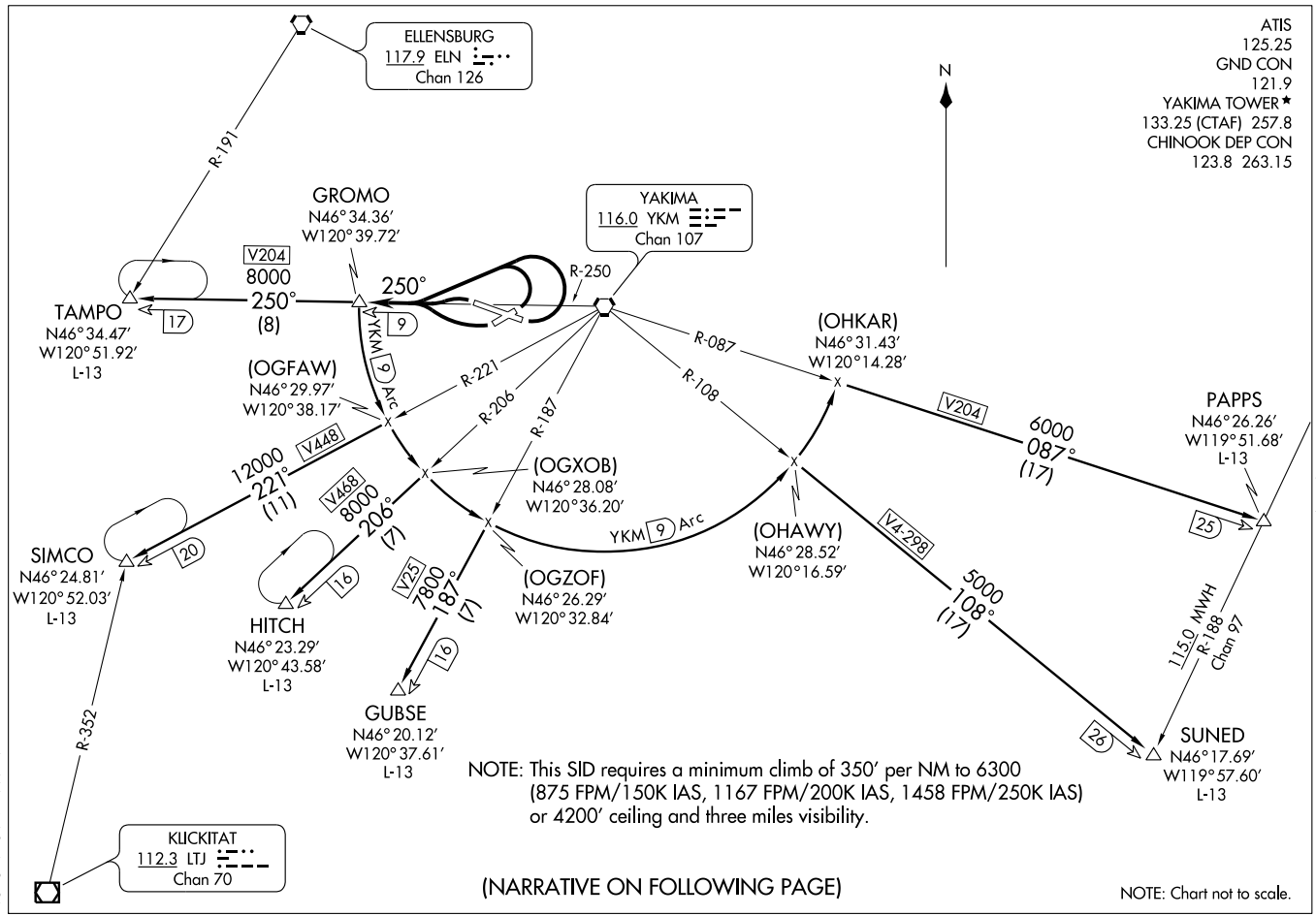
Knots	45	60	75	90	105
Min:Sec	9:18	7:00	5:36	4:40	4:00

GROMO TWO DEPARTURE

(GROMO2.GROMO) 07298

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
YAKIMA, WASHINGTON

SL-465 (FAA)



NOTE: This SID requires a minimum climb of 350′ per NM to 6300 (875 FPM/150K IAS, 1167 FPM/200K IAS, 1458 FPM/250K IAS) or 4200′ ceiling and three miles visibility.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

GROMO TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 9: Turn left, thence....

TAKE-OFF RUNWAY 22: Turn right, thence....

TAKE-OFF RUNWAY 27: Climb runway heading, thence....

....Intercept and proceed via YKM R-250 to the GROMO DME Fix (YKM R-250/9), thence via (assigned transition).

GUBSE TRANSITION (GROMO2.GUBSE): From over GROMO DME Fix via 9 DME Arc and V25 to GUBSE DME Fix.

HITCH TRANSITION (GROMO2.HITCH): From over GROMO DME Fix via 9 DME Arc and V468 to HITCH DME Fix. NOTE: Climb in holding pattern NE of HITCH DME Fix, right turns, 206° inbound to 8000 feet before proceeding on course.

PAPPS TRANSITION (GROMO2.PAPPS): From over GROMO DME Fix via 9 DME Arc and V204 to PAPPS INT.

SIMCO TRANSITION (GROMO2.SIMCO): From over GROMO DME Fix via 9 DME Arc and V448 to SIMCO INT. NOTE: Climb in holding pattern NE of SIMCO INT, right turns, 221° inbound to 12000 feet before proceeding on course.

SUNED TRANSITION (GROMO2.SUNED): From over GROMO DME Fix via 9 DME Arc and V4 to SUNED INT.

TAMPO TRANSITION (GROMO2.TAMPO): From over GROMO DME Fix via V204 to TAMPO INT. NOTE: Climb in holding pattern east of TAMPO INT, right turns, 250° inbound to 8000′ before proceeding on course.

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-YKM	APP CRS	Rwy Idg	7604
110.1	274°	TDZE	1068
		Apt Elev	1099

ILS Y RWY 27

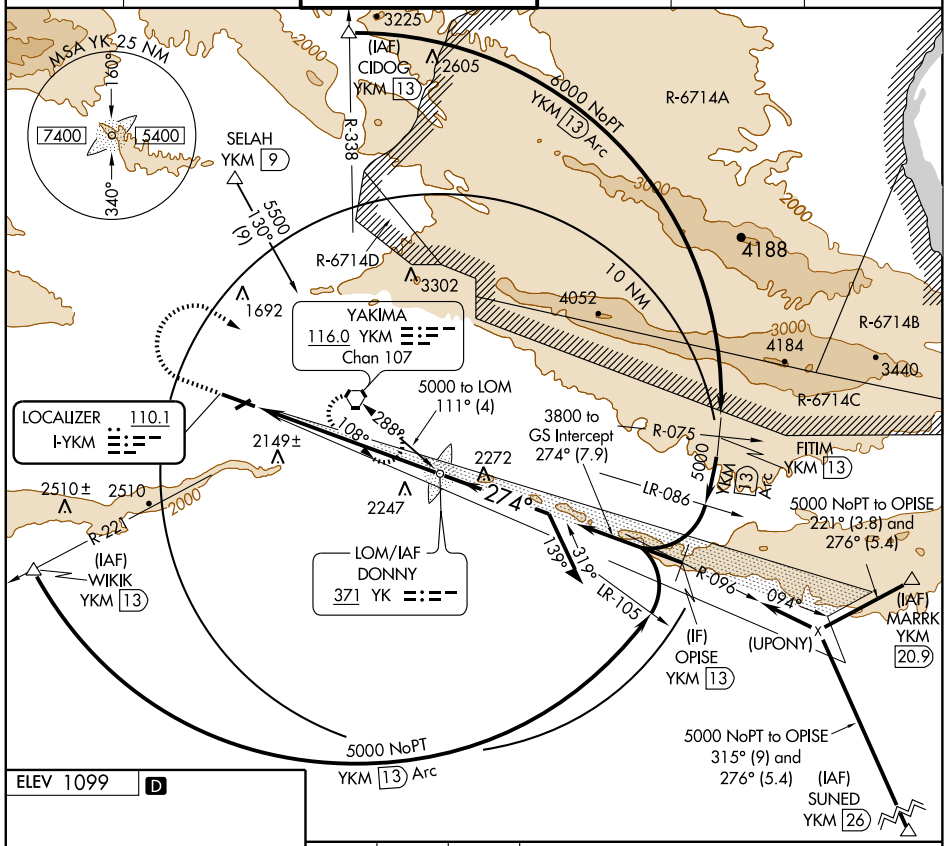
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

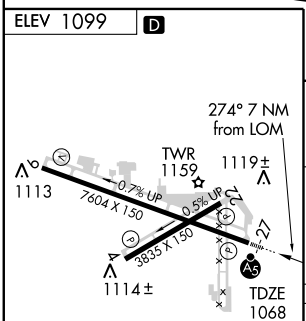
For inoperative MALSR, increase S-ILS 27 all Cats visibility to 2¼ . Circling NA south of Rwy 9/27. When local altimeter setting not received, procedure NA. Circling requires descent on GS to CMDA.

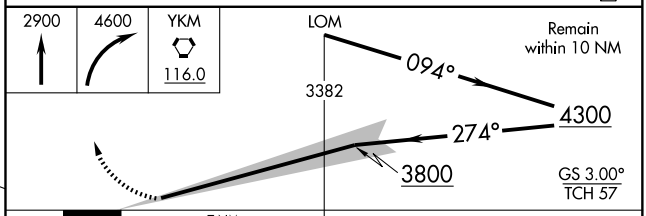
MALSR

MISSED APPROACH: Climb to 2900 then climbing right turn to 4600 direct YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS	CHINOOK APP CON★	YAKIMA TOWER★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 27	1668-1¾ 600 (600-1¾)			
CIRCLING	1680-2¼ 581 (600-2¼)		1700-2¼ 601 (700-2¼)	1800-2¼ 701 (800-2¼)

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-YKM	APP CRS	Rwy Idg	7604
110.1	274°	TDZE	1068
		Apt Elev	1099

ILS Z RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

Circling NA south of Rwy 9/27. When local altimeter setting not received, procedure NA. Circling requires descent on GS to CMDA. **RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 2600, then climbing right turn to 4600 direct YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS	CHINOOK APP CON★	YAKIMA TOWER★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95

MSA YK 25 NM
160°
7400
5400
340°
SELAH
YKM 9
5500
191
130°
Missed approach obstructions requires minimum climb gradient of 250 feet/NM.
(IAF)
CIDOG
YKM 13
3225
2605
R-338
5000 NoPT
YKM 13 Arc
R-6714A
3000
2000
4188
10 NM
4052
R-6714D
3302
1692
YAKIMA
116.0 YKM
Chan 107
R-6714B
3000
4184
3440
R-6714C
LOCALIZER 110.1
I-YKM
5000 to LOM
111° (4)
3800 to
GS Intercept
274° (7.9)
R-075
FITIM
YKM 13
5000
288°
108°
2149±
2272
2247
274°
LR-086
2510±
2510
2000
R-221
(IAF)
WIKIK
YKM 13
LOM/IAF
DONNY
371 YK
139°
319°
LR-105
R-096
094°
5000 NoPT to OPISE
221° (3.8) and
276° (5.4)
(IAF)
MARRK
YKM 20.9
(IF)
OPISE
YKM 13
(UPONY)
5000 NoPT
YKM 13 Arc
5000 NoPT to OPISE
315° (9) and
276° (5.4)
(IAF)
SUNED
YKM 26

ELEV 1099 D

274° 7 NM
from LOM
TWR
1159
1119±
1113
0.7% UP
7604 X 150
0.5% UP
22
27
3835 X 150
1114±
TDZE
1068

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

2600 4600 YKM 116.0

LOM
Remain
within 10 NM
094°
3382
4300
274°
3800
GS 3.00°
TCH 57
7 NM

CATEGORY	A	B	C	D
S-ILS 27	**1268/24 200 (200-½)			
CIRCLING	1640-1 541 (600-1)	1660-1 561 (600-1)	1700-1¾ 601 (700-1¾)	1800-2¼ 701 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-YKM	APP CRS	Rwy Idg	N/A
110.1	094°	TDZE	N/A
		Apt Elev	1099

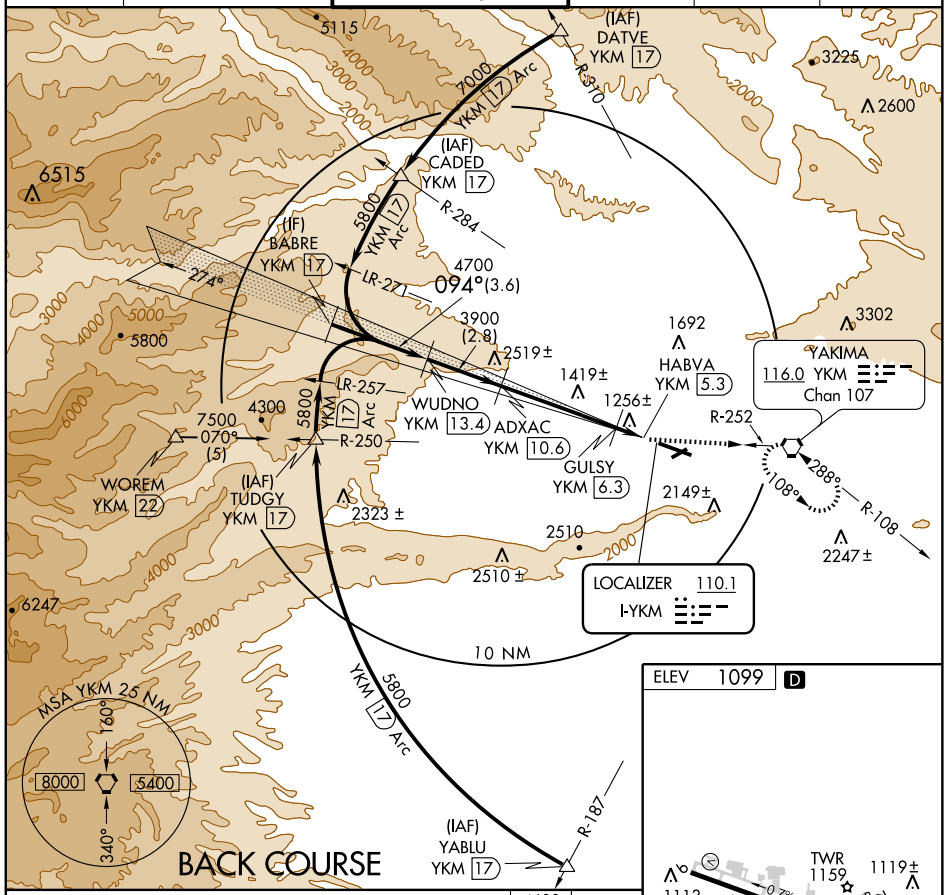
LOC/DME BC-B

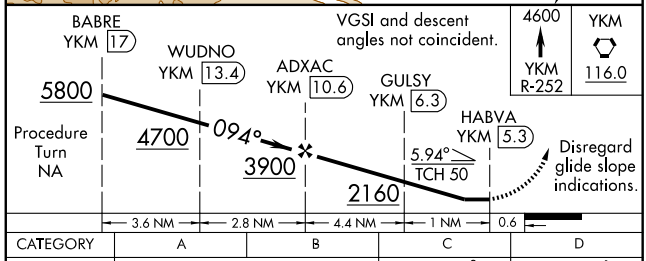
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

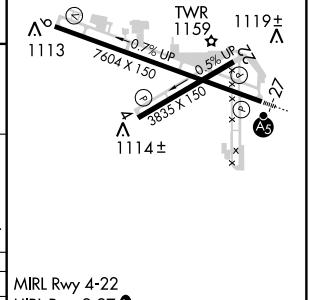
Simultaneous reception of I-YKM and YKM DME required.
Circling NA south of Rwy 9-27.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 4600 via YKM VORTAC R-252 to YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS	CHINOOK APP CON ★	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95



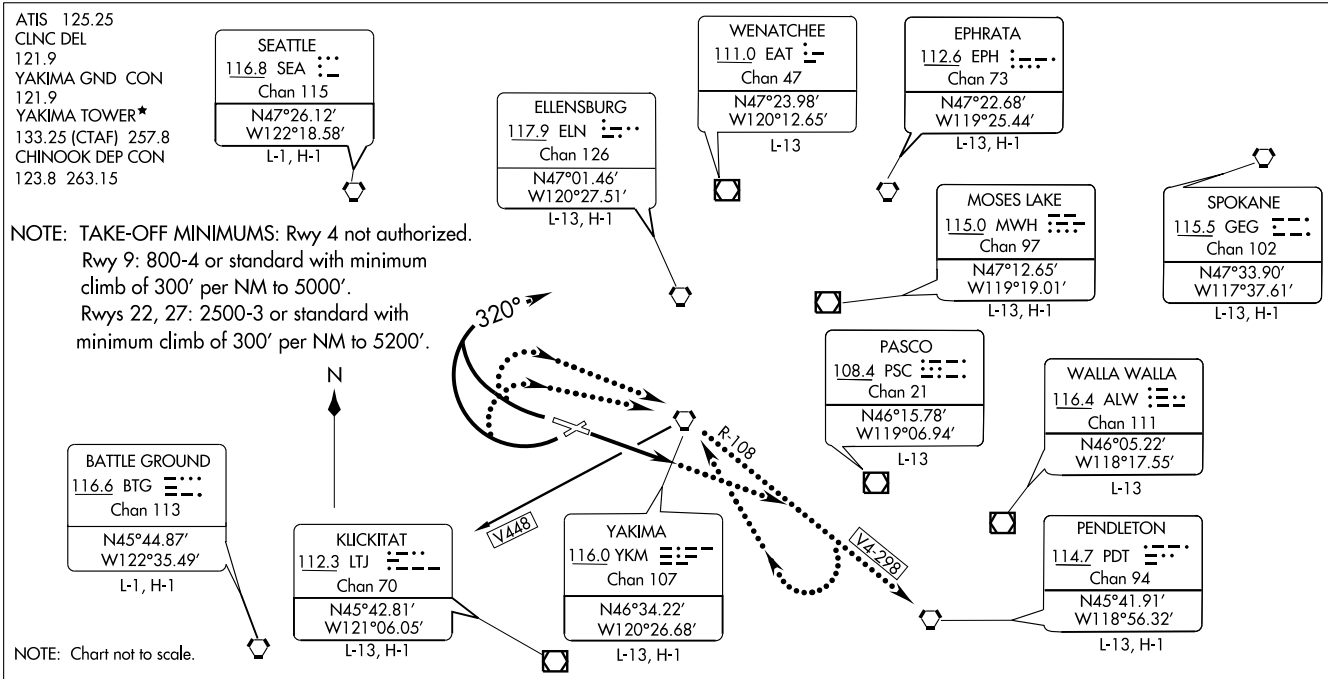




CATEGORY	A	B	C	D
CIRCLING	1760-1 661 (700-1)		1760-1¾ 661 (700-1¾)	1800-2¼ 701 (800-2¼)

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 14 JAN 2010 to 11 FEB 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Runway heading for vector to assigned route/fix. Thence ....

TAKE-OFF RUNWAY 22 and 27: Turn right heading 320° for vector to assigned route/fix. Thence ....

.... Maintain 10,000′ or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for one minute after departure: Rwy 9 climb runway heading and outbound YKM VORTAC R-108, Rwy 22, 27, climbing right turn direct YKM VORTAC and outbound YKM VORTAC R-108, Eastbound V4-V298 climb on course, other departures continue climb on YKM R-108 until reaching assigned altitude,(southwestbound V448 continue minimum climb of 300′ per NM to 9500′) then climbing right turn direct YKM VORTAC. Cross YKM VORTAC at or above MEA or MCA for route of flight.

APP CRS	Rwy Idg	7604
264°	TDZE	1068
	Apt Elev	1099

RNAV (GPS) Y RWY 27

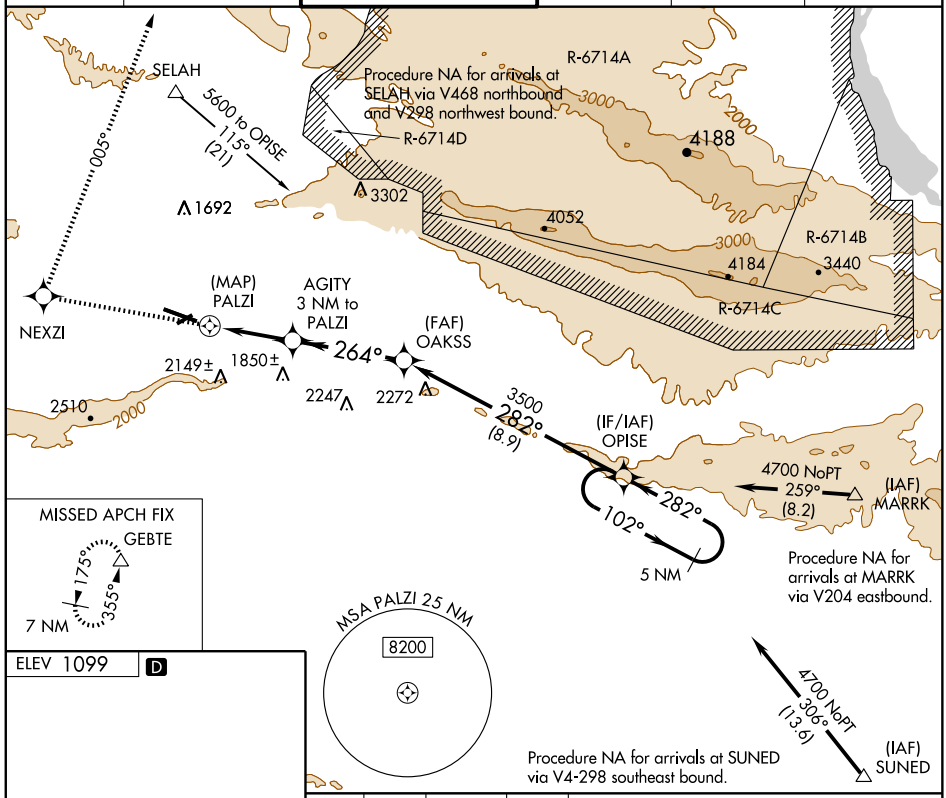
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

When local altimeter setting not received, procedure NA. Circling NA south of Rwy 9/27. DME/DME RNP- 0.3 NA. For inoperative MALSR increase LNAV Cat A visibility to RVR 5000.

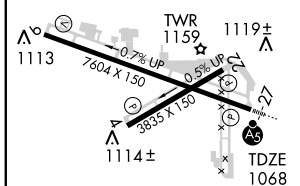
MALSR

MISSED APPROACH: Climb to 6200 direct NEXZI and right turn via track 005° to GEBTE and hold, continue climb-in-hold to 6200.

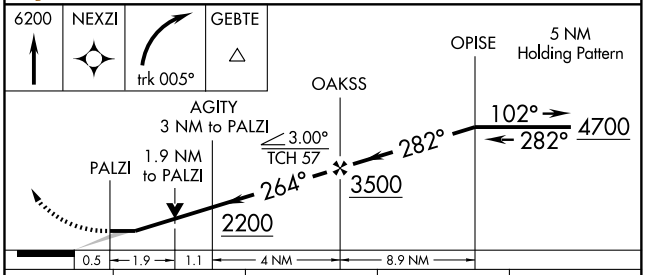
ATIS	CHINOOK APP CON★	YAKIMA TOWER★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95



ELEV 1099 D



MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22



CATEGORY	A	B	C	D
LNAV MDA	1880/40 812 (800-¾)		1880-2 812 (800-2)	1880-2¼ 812 (800-2¼)
CIRCLING	1880-1 781 (800-1)	1880-1¼ 781 (800-1¼)	1880-2½ 781 (800-2½)	1880-2¾ 781 (800-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 90512 W27A	APP CRS 274°	Rwy Idg 7604 TDZE 1068 Apt Elev 1099

RNAV (GPS) Z RWY 27

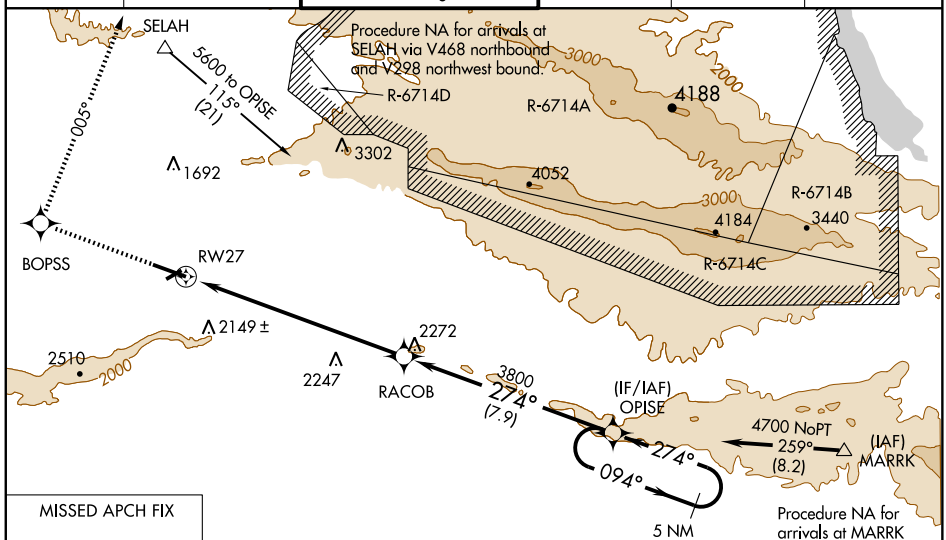
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

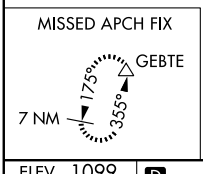
When local altimeter setting not received, procedure NA.
Circling NA south of Rwy 9/27. DME/DME RNP- 0.3 NA.
For inoperative MALSR increase LPV all Cats visibility to RVR 5000. Circling requires descent on glidepath to CMDA.

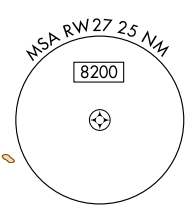
MALSR

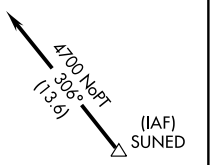
MISSED APPROACH: Climb to 6200 direct BOPSS and right turn via track 005° to GEBTE and hold, continue climb-in-hold to 6200.

ATIS	CHINOOK APP CON ★	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95

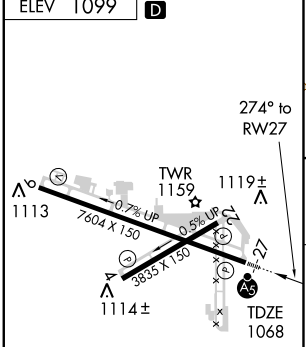


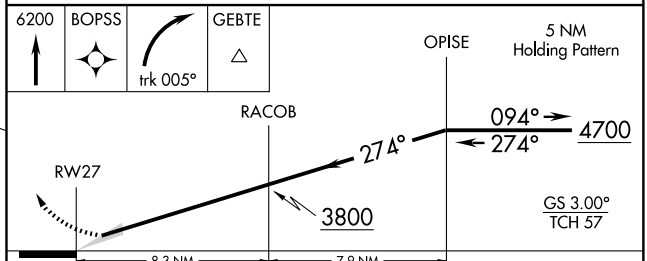






Procedure NA for arrivals at SUNED via V4-298 southeast bound.





CATEGORY	A	B	C	D
LPV DA		1329/24	261 (300-½)	
CIRCLING	1640-1 541 (600-1)	1660-1 561 (600-1)	1700-1¾ 601 (700-1¾)	1800-2¼ 701 (800-2¼)

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC YKM	APP CRS	Rwy Idg	N/A
116.0	251°	TDZE	N/A
Chan 107		Apt Elev	1099

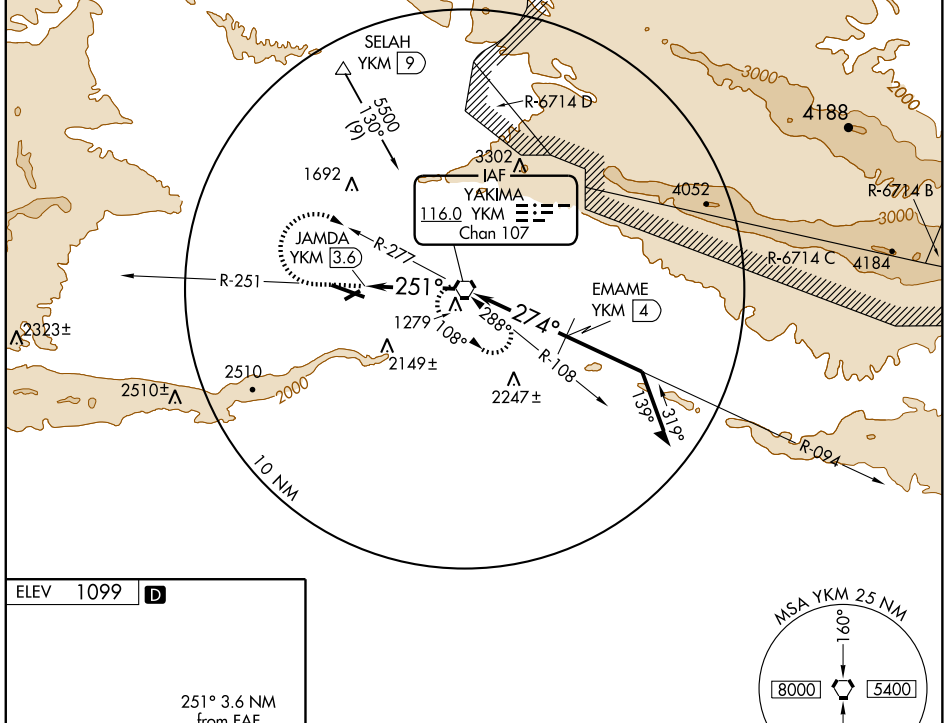
VOR-A

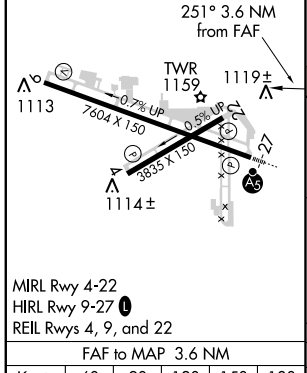
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

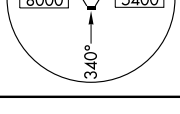
T DME required.
Circling not authorized South of Rwy 9-27.
When local altimeter setting not received, procedure NA.

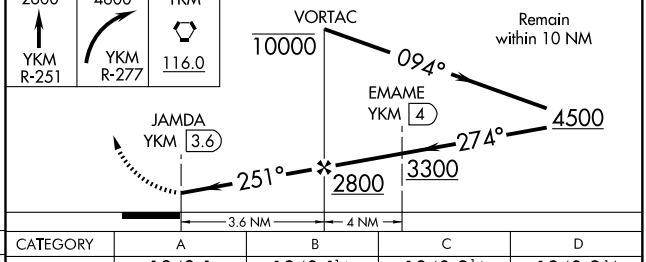
MISSED APPROACH: Climb to 2600 via YKM VORTAC R-251 then climbing right turn to 4600 via YKM VORTAC R-277 to YKM VORTAC and hold, continue climb-in-hold to 4600.

ATIS	CHINOOK APP CON★	YAKIMA TOWER★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95









FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
CIRCLING	1840-1 741 (800-1)	1840-1¼ 741 (800-1¼)	1840-2¼ 741 (800-2¼)	1840-2½ 741 (800-2½)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC YKM	APP CRS	Rwy Idg	7604
116.0	244°	TDZE	1068
Chan 107		Apt Elev	1099

VOR/DME or TACAN RWY 27

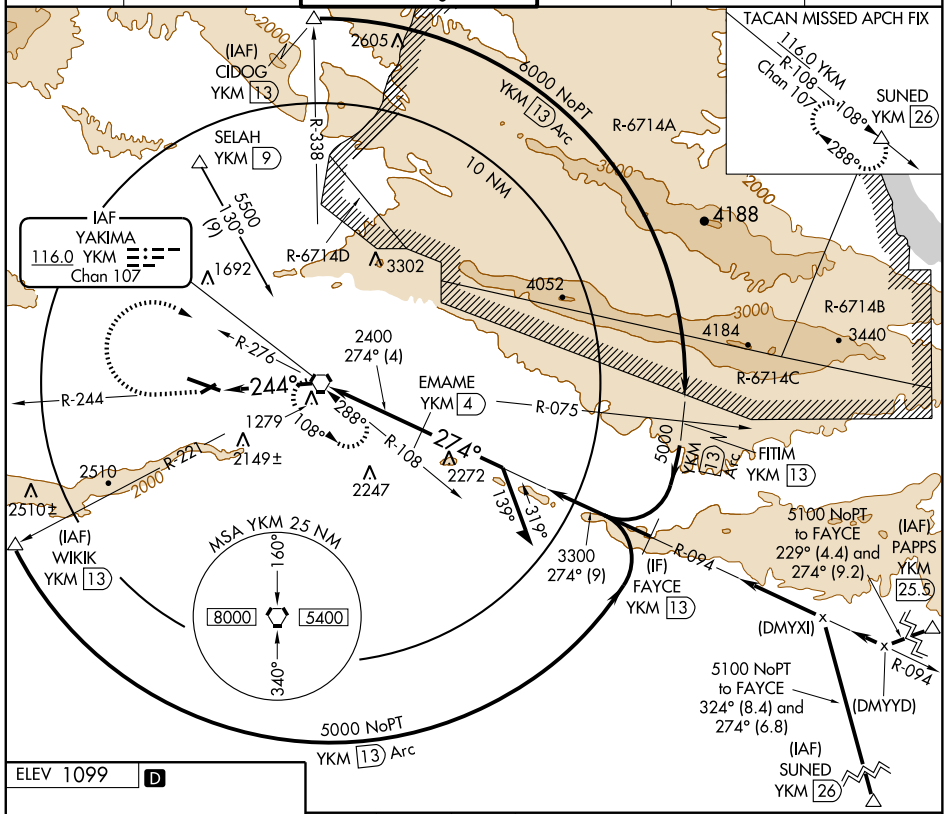
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

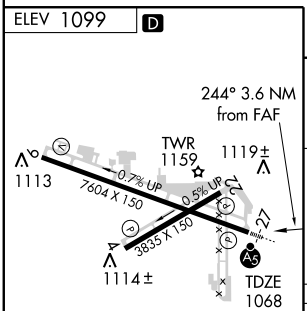
T Inoperative table does not apply. Circling NA south of Rwy 9-27. When local altimeter setting not received, procedure NA.

MALSR

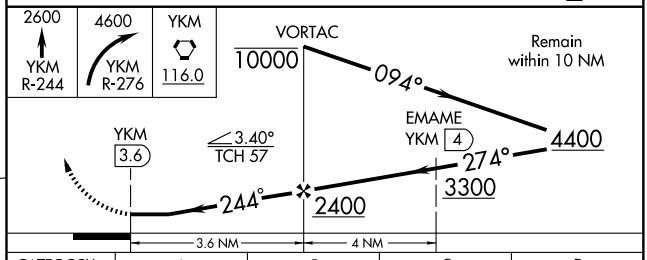
MISSED APPROACH: Climb to 2600 via YKM VORTAC R-244, then climbing right turn to 4600 via YKM VORTAC R-276 to YKM VORTAC and hold, continue climb-in-hold to 4600 (TACAN aircraft, continue climb to 5000 via YKM VORTAC R-108 to SUNED/YKM 26 DME and hold west, right turns, 108° inbound).

ATIS	CHINOOK APP CON ★	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95





MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22



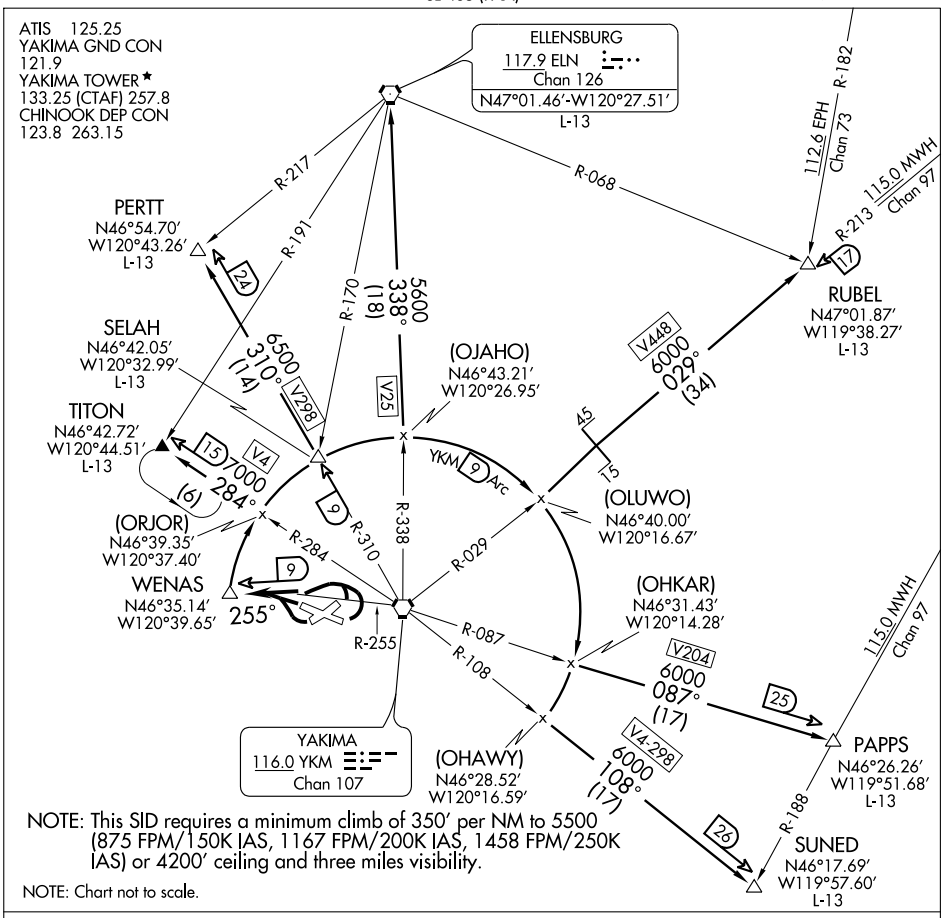
CATEGORY	A	B	C	D
S-27	2100/60 1032 (1100-1¼)	2100-1½ 1032 (1100-1½)	2100-3 1032 (1100-3)	
CIRCLING	2100-1¼ 1001 (1100-1¼)	2100-1½ 1001 (1100-1½)	2100-3 1001 (1100-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

(WENAS5.WENAS) 07298

WENAS FIVE DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
YAKIMA, WASHINGTON
SL-465 (FAA)



NOTE: This SID requires a minimum climb of 350' per NM to 5500 (875 FPM/150K IAS, 1167 FPM/200K IAS, 1458 FPM/250K IAS) or 4200' ceiling and three miles visibility.

NOTE: Chart not to scale.

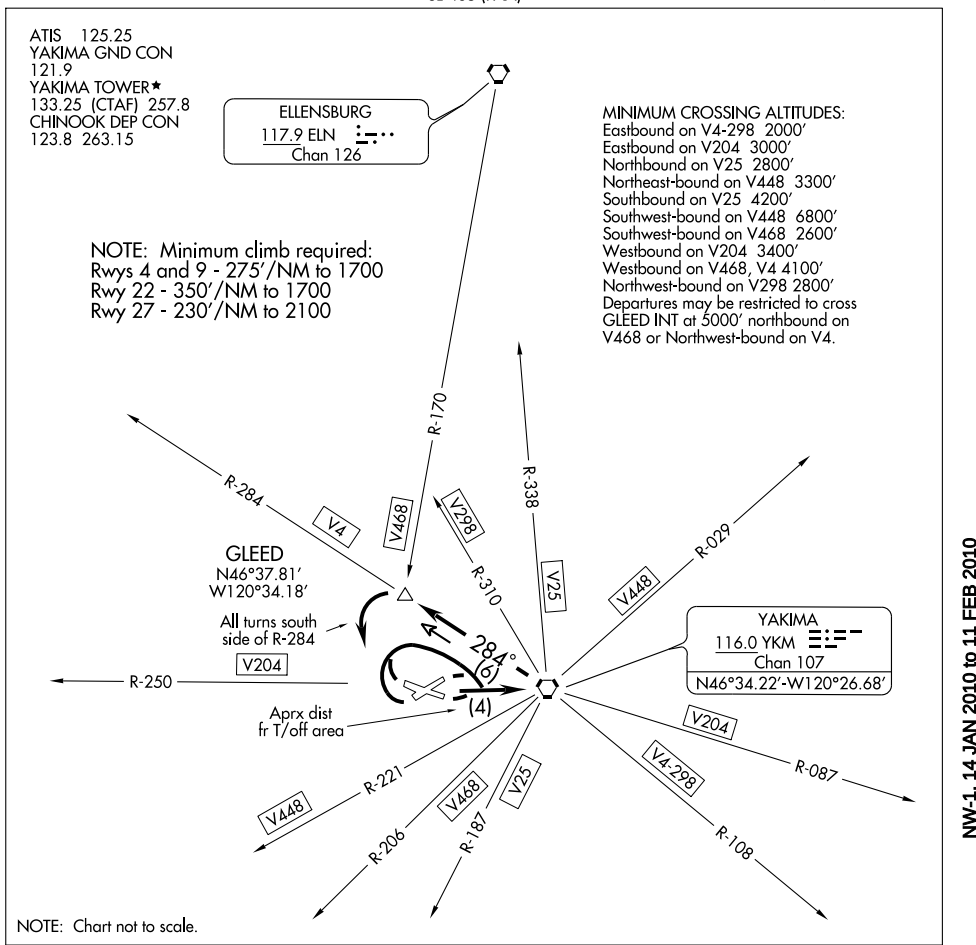
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 9: Turn left thence...
TAKE-OFF RUNWAY 22: Turn right thence....
TAKE-OFF RUNWAY 27: Climb runway heading thence....
....Intercept and proceed via YKM R-255 to the WENAS DME Fix (YKM 255/9) thence via (assigned transition).
ELLENSBURG TRANSITION (WENAS5.ELN): From over WENAS DME Fix via 9 DME Arc and V25 to ELN VORTAC.
PAPPS TRANSITION (WENAS5.PAPPS): From over WENAS DME Fix via 9 DME Arc and V204 to PAPPS INT.
PERTT TRANSITION (WENAS5.PERTT): From over WENAS DME Fix via 9 DME Arc and V298 to PERTT INT.
RUBEL TRANSITION (WENAS5.RUBEL): From over WENAS DME Fix via 9DME Arc and V448 to RUBEL INT.
SELAH TRANSITION (WENAS5.SELAH): From over WENAS DME Fix via 9 DME Arc to SELAH INT.
SUNED TRANSITION (WENAS5.SUNED): From over WENAS DME Fix via 9 DME Arc and V4 to SUNED INT.
TITON TRANSITION (WENAS5.TITON): From over WENAS DME Fix via 9 DME Arc and V4 to TITON INT.
NOTE: Climb in holding pattern Southeast of TITON INT, left turns, 284° inbound to 7000 feet before proceeding on course.

NW-1, 14 JAN 2010 to 11 FEB 2010

YAKIMA FIVE DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
YAKIMA, WASHINGTON
SL-465 (FAA)



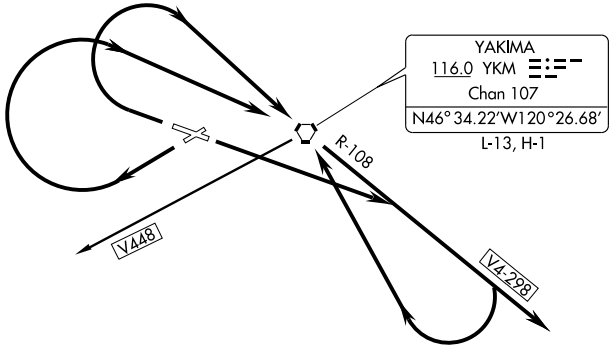
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 4, 22 or 27: Turn right, thence....
TAKE-OFF RUNWAY 9: Turn left, thence....
....Climb direct YKM VORTAC. Continue climb on YKM R-284 between the VORTAC and GLEED INT., all turns south of the 284 radial, to cross YKM VORTAC at or above (minimum crossing altitudes). Thence via (assigned route).

ZILLA ONE DEPARTURE (OBSTACLE)

ATIS 125.25
CLNC DEL
121.9
YAKIMA GND CON
121.9
YAKIMA TOWER★
133.25 (CTAF) 257.8
CHINOOK DEP CON
123.8 263.15

NOTE: TAKE-OFF MINIMUMS: Rwy 4 not authorized.
Rwy 9: 800-4 or standard with a minimum climb of 300′ per NM to 5000′.
Rwys 22 and 27: 2500-3 or standard with minimum climb of 300′ per NM to 5200′.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climb runway heading and outbound YKM R-108. Thence....

TAKE-OFF RUNWAYS 22 and 27: Climbing right turn direct YKM VORTAC and outbound R-108. Thence....

..... Eastbound aircraft V4-298 continue climb on course, other departures continue climb on YKM R-108 until reaching assigned altitude, (Southwestbound V448 continue minimum climb of 300′ per NM to 9500′), then climbing right turn direct YKM VORTAC. All aircraft cross YKM VORTAC at or above MEA or MCA for route of flight.

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ALBANY, OR

ALBANY MUNI ..... **VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

ARLINGTON, WA

ARLINGTON MUNI ..... **NDB or GPS Rwy 34**
Category D, 800-2½.
NA when Paine Field control tower closed.

ASTORIA, OR

ASTORIA RGNL ..... **RNAV (GPS) Rwy 26[12]**
VOR Rwy 8[3]
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Category C, 800-2¼; Category D, 900-3.

AURORA, OR

AURORA STATE ..... **LOC Rwy 17[1]**
RNAV (GPS) Rwy 17[23]
RNAV (GPS) Rwy 35[2]
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

BAKER, MT

BAKER MUNI ..... **NDB Rwy 13[1]**
NDB Rwy 31[2]
[1]Categories A,B, 1100-2; Categories C,D, 1100-3.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

BAKER CITY, OR

BAKER CITY MUNI ..... **RNAV (GPS) Rwy 13[12]**
VOR-A[13]
VOR/DME Rwy 13[24]
[1]NA when local weather not available.
[2]Category D, 900-2¾.
[3]Categories A,B, 1900-2; Categories C,D, 1900-3.
[4]NA when control zone not in effect.

NAME — ALTERNATE MINIMUMS

BELLINGHAM, WA

BELLINGHAM INTL ..... **ILS or LOC Rwy 16**
RNAV (GPS) Rwy 16
NA when local weather not available.

BIG PINEY, WY

MILEY MEMORIAL FIELD ..... **VOR Rwy 31**
Category D, 800-2¼.

BILLINGS, MT

BILLINGS LOGAN INTL ..... **NDB Rwy 10L[1]**
RNAV (GPS) Rwy 10L[2]
RNAV (GPS) Rwy 28R[3]
[1]Category D, 800-2¼.
[2]Categories A,B,C,D, 800-2¼.
[3]Categories A,B, 900-2; Categories C,D, 900-3.

BOISE, ID

BOISE AIR TERMINAL(GOWEN FIELD) ..... **LOC BC Rwy 28L[1]**
RNAV (GPS) Y Rwy 10R[2]
RNAV (GPS) Y Rwy 28L[2]
VOR/DME or TACAN Rwy 10L[1]
VOR/DME or TACAN Rwy 28L[1]
[1]Category E, 900-3.
[2]Category E, 1000-3.

BOZEMAN, MT

GALLATIN FIELD ..... **VOR Rwy 12**
Category C, 800-2¼; Category D, 800-2½.

BREMERTON, WA

BREMERTON NATIONAL .. **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19[1]
NA when local weather not available.
[1]Categories A,B, 1200-2; Categories C,D, 1200-3.

NAME ALTERNATE MINIMUMS

BUFFALO, WY

JOHNSON COUNTY ..... **RNAV (GPS) Rwy 31**[1]
VOR/DME Rwy 31[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category C, 800-2¼; Category D, 800-2½.

BURLEY, ID

BURLEY MUNI ..... **VOR-A**
VOR/DME-B

NA when local weather not received.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL ..... **NDB Rwy 10**[1]
RNAV (GPS) Rwy 10
RNAV (GPS) Rwy 28

NA when local weather not available.
[1]Categories A,B, 1300-2; Categories C,D, 1300-3.

BURNS, OR

BURNS MUNI ..... **VOR Rwy 30**

Categories A, B, 1400-2; Categories C,D, 1400-3.

BUTTE, MT

BERT MOONEY ..... **ILS Y Rwy 15**[1]
LOC/DME Rwy 15[2]
RNAV (GPS) Y Rwy 15[3]
RNAV (GPS) Z Rwy 15,1200-2
VOR or GPS-B,1400-3
VOR/DME or GPS-A,3000-3

[1]Categories A, B, C, 1200-4.
[2]Categories A,B, 1300-2; Categories C,D, 1300-3.
[3]Categories A,B, 1500-2; Categories C,D, 1500-3.

CALDWELL, ID

CALDWELL INDUSTRIAL ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

CASPER, WY

CASPER/NATRONA COUNTY INTL ..... **ILS or LOC Rwy 3**

ILS, Categories A,B, 800-2; Category C 800-2½; Category D, 800-2¾; Category E, 900-3.
LOC, Category C, 800-2½; Category D, 800-2¾; Category E, 900-3.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD ..... **ILS or LOC Rwy 27**[1]
NDB Rwy 27[1]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

CODY, WY

YELLOWSTONE REGIONAL ..... **RNAV (GPS) Rwy 22**[1]
VOR or GPS-A[2]

[1]Category C, 800-2¼; Category D, 200-2¾.
[2]Category D, 900-3.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD .... **ILS or LOC/DME Rwy 5**
NDB Rwy 5
RNAV (GPS) Rwy 5
VOR Rwy 5
VOR/DME Rwy 1

NA when local weather not available.

CORVALLIS, OR

CORVALLIS MUNI ..... **VOR-A**

Categories A,B,1200-2; Categories C,D, 1200-3.

DEER PARK, WA

DEER PARK ..... **RNAV (GPS) Rwy 34**

NA when local weather not available.

DILLON, MT

DILLON ..... **VOR or GPS-A,**1500-3
VOR/DME or GPS-B

NA when Dillon altimeter setting not available.

DOUGLAS, WY

CONVERSE COUNTY ..... **VOR Rwy 29**

Categories A,B, 1100-2; Categories C,D, 1100-3. DME standard.

EASTSOUND, WA

ORCAS ISLAND ..... **RNAV (GPS)-A**

Categories A, B, 1100-2.
NA when local weather not available.

ELLENSBURG, WA

BOWERS FIELD ..... **RNAV (GPS) Rwy 25**[1]
RNAV (GPS) Rwy 29
VOR-B[2]

NA when local weather not available.
[1]Category D, 800-2¼.
[2]Category A, 1500-2.

NAME ALTERNATE MINIMUMS

EPHRATA, WA
EPHRATA MUNI ..... **RNAV (GPS) Rwy 3[1]**
RNAV (GPS) Rwy 21[2]
VOR/DME Rwy 3[1]
VOR Rwy 21[1]
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

EUGENE, OR
MAHLON-SWEET
FIELD ..... **ILS or LOC/DME Z Rwy 16R[1]**
ILS or LOC Y Rwy 16R[1]
ILS or LOC/DME Rwy 16L[12]
RNAV (GPS) Rwy 34R[2]
VOR or GPS-A[3]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY
BURNS FIELD ..... **ILS or LOC/DME Rwy 23**
Categories C,D, 700-2.

EVERETT, WA
SNOHOMISH COUNTY(PAINE
FIELD) ..... **ILS or LOC/DME Rwy 16R**
NA when control tower closed.
NA when local weather not available.

FORT BENTON, MT
FORT BENTON ..... **RNAV (GPS) Rwy 23**
NA when local weather not available.

GILLETTE, WY
GILLETTE-CAMPBELL
COUNTY ..... **ILS or LOC Rwy 34[12]**
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[4]
VOR/DME Rwy 16[5]
VOR/DME Rwy 34[1]
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]NA when control tower closed.
[3]Categories A,B,C, 800-2¼; Category D, 1000-3.
[4]Categories A,B,C,D, 1200-4.
[5]Category C, 800-2¼; Category D, 1000-3.

GLASGOW, MT
WOKAL FIELD/
GLASGOW INTL ..... **VOR Rwy 12**
Categories A,B, 900-2; Categories C,D, 900-3.
VOR/DME standard.

NAME ALTERNATE MINIMUMS

GLENDIVE, MT
DAWSON
COMMUNITY ..... **NDB or GPS Rwy 12,**900-2¾

GOODING, ID
GOODING MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
NA when local weather not available.

GRAY AAF (KGRF)
FORT LEWIS, WA ..... **NDB Rwy 15**
NDB Rwy 33
ILS or LOC Rwy 15
COPTER NDB Rwy 15
NA when control tower closed.

GREAT FALLS, MT
GREAT FALLS INTL ..... **NDB Rwy 34**
Category D, 800-2¼.

GREYBULL, WY
SOUTH BIG HORN COUNTY .... **RNAV (GPS)-A**
RNAV (GPS) Rwy 33[1]
NA when local weather not available.
[1]Category D, 1200-3.

HAILEY, ID
FRIEDMAN
MEMORIAL ..... **RNAV (GPS) W Rwy 31**
Categories A,B, 1900-2; Category C, 1900-3.

HAVRE, MT
HAVRE CITY-COUNTY ..... **VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

NAME ALTERNATE MINIMUMS

HELENA, MT

HELENA RGNL ..... **ILS or LOC Y Rwy 27**[12]
ILS or LOC Z Rwy 27[12]
LOC/DME BC-C[13]
NDB-D[14]
RNAV (GPS) Y Rwy 9[5]
RNAV (GPS) Rwy 23[6]
RNAV (GPS) X Rwy 27[5]
RNAV (RNP) Z Rwy 9[7]
RNAV (RNP) Y Rwy 27[7]
RNAV (RNP) Z Rwy 27[79]
VOR-A[8]
VOR/DME-B[6]

[1]NA when control tower closed.
[2]Categories A, B, 1600-2; Categories C, D, E, 1600-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.
[4]Category A, 1200-2.
[5]Categories A, B, 1600-2; Categories C, D, 1600-3.
[6]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[7]NA when local weather not available.
[8]Categories A, B, 2900-2; Categories C, D, 2900-3.
[9]1000-4.

HOQUIAM, WA

BOWERMAN ..... **RNAV (GPS) Rwy 24**[1]
VOR/DME Rwy 24[2]
VOR Rwy 6[1]

[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

IDAHO FALLS, ID

IDAHO FALLS RGNL ..... **ILS or LOC Rwy 20**[1]
LOC BC Rwy 2[2]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[3]

[1]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[2]Category E, 800-2½.
[3]NA when local weather not available.

JACKSON, WY

JACKSON HOLE ..... **RNAV (GPS) X Rwy 1**[1]
RNAV (GPS) Y Rwy 19[1]
RNAV (RNP) Y Rwy 1, 10681200-4
VOR/DME Rwy 1[2]
VOR/DME Rwy 19[3]

[1]Categories A,B, 1200-2; Categories C,D, 1200-3.
[2]Categories A,B,1000-2; Categories C,D, 1000-3.
[3]Categories A,B,1400-2; Categories C,D, 1400-3.

NAME ALTERNATE MINIMUMS

JEROME, ID

JEROME COUNTY ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27[1]
VOR/DME-A

NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.

JOHN DAY, OR

GRANT COUNTY RGNL/
OGILVIE FIELD ..... **RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

KALISPELL, MT

GLACIER PARK INTL ..... **ILS or LOC Rwy 2**[1]
RNAV (RNP) Y Rwy 2[2]
RNAV (RNP) Rwy 20, 800-2½[2]

[1]Categories C, D, 700-2.
[2]NA when local weather not available.

KLAMATH FALLS, OR

KLAMATH FALLS ..... **ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 14[2]
VOR/DME or TACAN Rwy 14[3]
VOR/DME or TACAN Rwy 32[4]
VOR or GPS-B,2100-3

[1]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3. LOC, DME required.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[3]Categories C,D, 1000-3; Category E, NA.
[4]Category B, 900-2; Categories C,D, 1000-3; Category E, 1500-3.

LAKEVIEW, OR

LAKE COUNTY ..... **VOR/DME-A**
Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

LEWISTON, ID

LEWISTON-NEZ PERCE
COUNTY ..... **ILS Rwy 26**[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 26[3]
VOR Rwy 8[4]
VOR Rwy 26[3]

[1]ILS, Category D, 800-2¼.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.

LEWISTOWN, MT

LEWISTOWN MUNI ..... **RNAV (GPS) Rwy 7**
VOR Rwy 7

Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

LIVINGSTON, MT

MISSION FIELD ..... **VOR/DME-B**[1]
VOR-A[2]

[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Categories A, B, 2200-2; Categories C,D, 2200-3.

MC MINNVILE, OR

MC MINNVILLE MUNI ..... **ILS or LOC Rwy 22**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR/DME-B

NA when local weather not available.
Category D 800-2¼.

MEDFORD, OR

ROGUE VALLEY INTL-
MEDFORD ..... **ILS or LOC/DME Rwy 14**[12]
LOC/DME BC-B[23]
RNAV (GPS)-D[3]
RNAV (GPS) Rwy 14[4]
VOR-A[5]
VOR/DME-C[3]
VOR/DME Rwy 14[5]

[1]ILS, Categories A, B, C, 700-2; Category D, 900-2½. LOC, Category D, 900-2½.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1400-2;Category C, D 1400-3.

MISSOULA, MT

MISSOULA INTL ..... **ILS Rwy 11**[1]
RNAV (GPS) Y Rwy 11[23]
RNAV (RNP) Z Rwy 11[2]**,**800-2½
VOR/DME or GPS-A,2000-3
VOR/DME or GPS-B,2000-3

[1]ILS, 1600-6. LOC,NA.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.

MOSES LAKE, WA

GRANT COUNTY INTL ... **ILS or LOC Rwy 32R**[1]
NDB Rwy 32R[2]
RNAV (GPS) Rwy 4[1]
RNAV (GPS) Rwy 14L[1]
RNAV (GPS) Rwy 22[1]
VOR Rwy 4[2]
VOR -1 Rwy 14L[2]
VOR -3 Rwy 14L[2]
VOR Rwy 22[2]
VOR Rwy 32R[2]

[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWCASTLE, WY

MONDELL FIELD ..... **VOR or GPS Rwy 31**

NA except for operators with approved weather reporting service.
Categories A,B, 900-2;Categories C,D, 900-3.

NORTH BEND, OR

SOUTHWEST OREGON
RGNL ..... **ILS or LOC Rwy 4**[1]
NDB or GPS Rwy 4[2]
VOR or GPS-A[3]
VOR/DME or GPS-B[4]
VOR/DME Rwy 4[4]

[1]ILS,Categories A,B, 800-2; Category C, 900-2¼, Category D,1000-3. LOC, Category C, 900-2¼, Category D,1000-3.
[2]Category C, 900-2¼;Category D, 1000-3.
[3]Categories A,B, 1100-2; Categories C,D, 1100-3.
[4]Categories C,D, 1000-3.

OAK HARBOR, WA

AJ EISENBERG ..... **RNAV (GPS) Rwy 7**

NA when local weather not available.

OLYMPIA, WA

OLYMPIA RGNL ..... **ILS or LOC Rwy 17**[12]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 35[2]
VOR-A[23]
VOR/DME Rwy 35[2]

[1]ILS, Categories C, D, 700-2.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

ONTARIO, OR

ONTARIO MUNI ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PASCO, WA

TRI-CITIES ..... **ILS or LOC Rwy 21R**[12]
RNAV (GPS) Rwy 3L
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 21R
RNAV (GPS) Rwy 30
VOR Rwy 21R[3]
VOR/DME Rwy 30

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

PENDLETON, OR

EASTERN OREGON RGNL AT
PENDLETON ..... **ILS or LOC/DME Rwy 25**[1]
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 29
VOR Rwy 7

NA when local weather not available.
[1]ILS, NA when control tower closed.

PINEDALE, WY

PINEDALE/RALPH WENZ
FIELD ..... **NDB-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]

NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.

POCATELLO, ID

POCATELLO RGNL..... **ILS or LOC Rwy 21**[1]
RNAV (GPS) Rwy 3[2]
RNAV (GPS) Rwy 21[2]

[1]NA when control zone not in effect.
[2]NA when local weather not available.

PORT ANGELES, WA

WILLIAM R
FAIRCHILD INTL ..... **ILS or LOC Rwy 8**
RNAV (GPS) Rwy 8[1]
RNAV (GPS) Rwy 26

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

PORTLAND, OR

PORTLAND INTL ..... **ILS or LOC Rwy 10L**[1]
ILS or LOC Rwy 10R[2]
ILS or LOC Rwy 28L[3]
ILS or LOC Rwy 28R[4]
LOC/DME Rwy 21[5]
RNAV (GPS) Rwy 10L[5]
RNAV (GPS) Rwy 10R[6]
RNAV (GPS) Rwy 12[7]
RNAV (GPS) Rwy 28L[8]
RNAV (GPS) Rwy 28R[8]
VOR/DME Rwy 21[5]
VOR-A [9]
VOR Rwy 28R[5]

[1]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3. LOC, Category D, 1000-3.
[2]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[3]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3; Category E, 1100-3. LOC, Category D, 1000-3; Category E, 1100-3.
[4]ILS, Category A, 700-2; Categories B,C, 800-2; Category D, 1000-3.
LOC, Category D, 1000-3.
[5]Category D, 1000-3.
[6]Categories A,B,C 800-5; Category D, 1000-5.
[7]NA when local weather not available.
[8]Category D, 1000-3.
[9]Categories A,B, 900-2; Category C, 900-2½; Category D, 1000-3.

PORTLAND-HILLSBORO .. **ILS or LOC Rwy 12**[1]
RNAV (GPS) Rwy 12[2]

[1]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[2]NA when local weather not available.

PORTLAND-TROUTDALE ..... **NDB or GPS-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1300-3.

PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW
MUNI ..... **RNAV (GPS) Rwy 5,**800-2¼

RAWLINS, WY

RAWLINS MUNI/
HARVEY FIELD ..... **NDB or GPS-A**[1]
VOR or GPS Rwy 22,1000-3[2]

[1]Category D, 1000-3.
[2]NA when Rawlins FSS closed.

NAME ALTERNATE MINIMUMS

REDMOND, OR

ROBERTS FIELD ..... **ILS or LOC Rwy 22**[1]
VOR/DME Rwy 22[2]

[1]ILS,LOC,Category D,800-2¼; Category E, 800-2½.
[2]Category A, B, 1000-2; Category C, 1000-2¾; Category D, E, 1000-3.

RENTON, WA

RENTON MUNI ..... **NDB Rwy 16**[1]
RNAV (GPS) Y Rwy 16[2]
RNAV (GPS) Z Rwy 16[3]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[3]Categories A, B, 900-2.

REXBURG, ID

REXBURG-MADISON COUNTY ..... **RNAV (GPS) Rwy 35**

NA when local weather not available.
Category D, 800-2½.

RICHLAND, WA

RICHLAND ..... **NDB Rwy 19**[1]
RNAV (GPS) Rwy 19[1]
RNAV (GPS) Rwy 26[1]
VOR/DME-A[2]
VOR Rwy 26[1]

[1]Category D, 800-2½.
[2]Categories A,B, 900-2; Category C, 900-2¾; Category D, 900-3.

ROCK SPRINGS, WY

ROCK SPRINGS SWEETWATER COUNTY ..... **VOR-B**

Category D, 800-2¼.

ROSEBURG, OR

ROSEBURG RGNL ..... **RNAV (GPS)-B**

NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

SALEM, OR

MCNARY FIELD ..... **ILS or LOC Rwy 31**[12]
LOC/DME Rwy 31[3]
RNAV (GPS) Rwy 31[13]

[1]NA when local weather not available.
[2]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK ..... **VOR/DME or GPS-A**

Category B, 900-2; Category C, 1000-2¾; Category D 1300-3.

SEATTLE, WA

BOEING FIELD-KING COUNTY INTL ..... **ILS Rwy 13R**[1]
ILS Rwy 31L[2]
LOC/DME Rwy 13R[3]
RNAV (GPS) Y Rwy 13R[4]
RNAV (RNP) Z Rwy 13R[5]

[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[2]Category A, 800-2; Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[3]Category B, 900-2; Category C, 900-2½; Category D, 1000-3.
[4]Category B, 900-2; Category C, 900-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2¼.

SHERIDAN, WY

SHERIDAN COUNTY ..... **ILS or LOC/DME Rwy 32**
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR Rwy 14

NA when local weather not received.
Category D, 800-2¼.

SIDNEY, MT

SIDNEY-RICHLAND MUNI ..... **NDB Rwy 1**[1]
NDB Rwy 19[2]

[1]Category D, 800-2¼.
[2]Categories C,D, 800-2½.

SPOKANE, WA

FELTS FIELD ..... **ILS/DME Rwy 21R**[1]
RNAV (GPS)-A[2]
RNAV (GPS) Rwy 3L[2]
VOR Rwy 3L[3]

[1]Categories A,B, 1000-2;Category C, 1000-2¾.
[2]Categories A,B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[3]Categories A,B, 1000-2; Categories C,D, 1000-3

SPOKANE INTL ..... **ILS or LOC Rwy 3**[1]
ILS or LOC/DME Rwy 21[1]
VOR Rwy 3[2]

[1]ILS, Category D, 700-2.
[2]Category E, 800-2½.

NAME ALTERNATE MINIMUMS

TACOMA, WA

TACOMA NARROWS ..... **ILS Rwy 17**[1]
NDB Rwy 35[1]
RNAV (GPS) Rwy 17[12]
RNAV (GPS) Rwy 35[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

THE DALLES, OR

COLUMBIA GEORGE RGNL/
THE DALLES MUNI ..... **RNAV (GPS)-A**
Categories A,B, 1100-2; Category C, 1100-3; Category D, 1200-3.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL ..... **ILS or LOC Rwy 25**[1]
NDB Rwy 25
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR Rwy 7[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]Category C, 800-2¼; Category D, 800-2½.

WALLA WALLA, WA

WALLA WALLA RGNL ..... **ILS or LOC Rwy 20**[1]
NDB Rwy 20, 1000-3
RNAV (GPS) Rwy 2[23]
RNAV (GPS) Rwy 16[2]
RNAV (GPS) Rwy 20[2]
VOR/DME Rwy 2[2]

[1]ILS,LOC, Categories A,B, 1100-2; Categories C, D, 1100-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.

NAME ALTERNATE MINIMUMS

WENATCHEE, WA

PANGBORN MEMORIAL ..... **ILS Y Rwy 12,** 1300-4
VOR/DME-C[12]
VOR/DME-A[3]

[1]NA when local weather not available.
[2]Categories A, B, 1500-2; Categories C, D, 1500-3.
[3]Categories A, B, 2000-2; Categories C, D, 2000-3.

WOLF POINT, MT

L.M. CLAYTON ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

WORLAND, WY

WORLAND MUNI ..... **VOR or GPS Rwy 16**
Categories C,D, 800-2½.

YAKIMA, WA

YAKIMA AIR TERMINAL/ MCALLISTER FIELD ..... **ILS Y Rwy 27**[12]
ILS Z Rwy 27[13]
LOC/DME BC-B[14]
RNAV (GPS) Y Rwy 27[5]
RNAV (GPS) Z Rwy 27[4]
VOR/DME or TACAN Rwy 27[6]
VOR-A[7]

[1]NA when control tower closed.
[2]ILS, Categories A, B, 600-2¼; Category C, 700-2¼; Category D, 800-2¼.
[3]Category C, 700-2; Category D, 800-2¼
[4]Category D, 800-2¼.
[5]Category C, 800-2½; Category D, 800-2¾.
[6]Categories A, B, 1100-2; Categories C, D, 1100-3.
[7]Category C, 800-2¼; Category D, 800-2½.

CHEYENNE, WY

Amdt 1B, MAY 8, 2008 (FAA) ELEV **6159**

CHEYENNE RGNL/JERRY OLSON FIELD

RADAR - 124.55 263.075 NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	27	3.0°/55/918	ABCDE	**6321**/24	200	(200-½)				
ASR	9		ABC	**6500**-1	357	(400-1)	DE	**6500**-1¼	357	(400-1¼)
	27		ABC	**6520**/24	399	(400-½)	DE	**6520**/50	399	(400-1)
CIR	ALL		AB	**6660**-1	501	(600-1)	C	**6660**-1½	501	(600-1½)
			D	**6720**-2	561	(600-2)	E	**6960**-2¾	801	(900-2¾)

For inoperative MALSR increase, PAR 27 category E visibility to RVR 4000, ASR 27 category D visibility to RVR 6000 and ASR 27 category E visibility to 1½. PAR not available when ASR out of service.

GRAY AAF (KGRF),

FORT LEWIS, WA (09155 USA) **ELEV 300**

RADAR - (E) 128.2 139.925 239.0 317.4 NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR [13]	15	3.0°/55/947	ABCD	**499**/40	200	(200-¾)
	33 [2]	3.0°/39/730	ABCD	**500**-¾	200	(200-¾)

[1]Opr Mon-Fri 1600-0759Z++, exc federal holidays. POC DSN 357-4953 or C253-967-4953. Svc incl PAR and apch mnt of ILS and NDB. [2]PAR not authorized when R6703D is active. [3]Circling not authorized.

OPS 138.6
Contact Seattle approach for vectors to Final on 120.1 290.9
Missed Approach:
Rwy 15: Climb to 700, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 700, then climbing left turn to 2000 direct GR LOM and hold NW, RT, 147° inbound (ADF REQUIRED).
Rwy 33: Climb to 700, then climbing left turn to 2000 via heading 270° for RADAR vectors; or when directed by ATC, climb to 2000 direct GR LOM and hold NW, RT, 147° inbound (ADF REQUIRED).
LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

OAK HARBOR (OKH), WA

Amdt 1A, Mar 12, 2009 (FAA) **ELEV 193**

A J EISENBERG

RADAR - 118.2 285.65 ▽ ⚠NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	7		AB	620-1	427	(500-1)
			CD	NA		
CIR	All Rwy		A	620-1	427	(500-1)
			B	660-1	467	(500-1)
			CD	NA		

When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet. Circling north of Rwy 7-25 NA at night. Visibility reduction by helicopters NA.

WHIDBEY ISLAND NAS (KNUW), (AULT FLD) WA (09071 USN) ELEV 47

RADAR - (E) 126.05x 126.85x 266.8x 299.6x 310.8x 322.5x 327.0x 343.75x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	25[2 3 10]	3.0°/40/718	ABCDE	**228**-½	200	(200-½)
	14[5 11]	3.0°/49/947	ABCDE	**139**-¼	100	(100-¼)
	7	3.0°/50/961	ABCDE	**125**-½	100	(100-½)
	32[2 10]	3.0°/34/776	ABCDE	**147**-¼	100	(100-¼)
W/O GS	25[3 6]		ABC	**480**-¾	452	(500-¾)
			DE	**480**-1	452	(500-1)
	14[7 11]		AB	**340**-½	301	(300-½)
			CDE	**340**-¾	301	(300-¾)
	7		ABCDE	**300**-1	275	(300-1)
	32[8 10]		ABC	**500**-¾	453	(500-¾)
			DE	**500**-1	453	(500-1)
ASR	7		AB	**440**-1	415	(400-1)
			CD	**440**-1¼	415	(400-1¼)
			E	**440**-1½	415	(400-1½)
	14[4 11]		AB	**600**-½	561	(600-½)
			C	**600**-1	561	(600-1)
			D	**600**-1¼	561	(600-1¼)
			E	**600**-1½	561	(600-1½)
	32[8 11]		AB	**680**-½	633	(700-½)
			C	**680**-1¼	633	(700-1¼)
			D	**680**-1½	633	(700-1½)
			E	**680**-1¾	633	(700-1¾)
	25[4]		AB	**760**-½	732	(800-½)
			C	**760**-1½	732	(800-1½)
			D	**760**-1¾	732	(800-1¾)
			E	**760**-2	732	(800-2)
CIR[9]			A	**780**-1	733	(800-1)
			B	**800**-1¼	753	(800-1¼)
			C	**800**-2¼	753	(800-2¼)
			D	**860**-2¾	813	(900-2¾)
			E	**1100**-3	1053	(1100-3)

[1]No-NOTAM MP: PAR 1600-0800Z++ Mon. [2]When ALS inop, increase vis CAT ABCDE to ¾ mile. [3]Caution: Trees 265' MSL, 3270' from THLD, 1647' right of RCL. [4]When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 2 miles, CAT E to 2¼ miles. [5]When ALS inop, increase CAT ABCDE vis to ½ mile. [6]When ALS inop, increase vis CAT ABC to 1¼ miles, CAT DE to 1½ miles. [7]When ALS inop, increase vis CAT ABCDE to 1 mile. [8]When ALS inop, increase vis CAT ABC to 1¼ mile, CAT DE to 1½ mile. [9]When CIRCLING to RWY 25 or 32, increase vis CAT A to 1¼ mile. [10]Amdt 2. [11]Amdt 1.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME — TAKE-OFF MINIMUMS

AFTON, WY

AFTON MUNI

DEPARTURE PROCEDURE: **Rwy 16,** Use LUNDI DEPARTURE. **Rwy 34,** use AFTON DEPARTURE.

ALBANY, OR

ALBANY MUNI

DEPARTURE PROCEDURE: **Rwy 16,** turn right. **Rwy 34**, turn left. **All aircraft** climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (E, right turns, 261° inbound) to cross CVO VOR/DME at or above 3000.

ANACONDA, MT

BOWMAN FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions. **Rwy 16,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions. **Rwy 22,** NA-obstacles. **Rwy 34,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NAME — TAKE-OFF MINIMUMS

BOWMAN FIELD(CON'T)

Rwy 16, climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

NOTE: **Rwy 16,** multiple trees beginning 865' from departure end of runway, 243' left of centerline, up to 70' AGL/5097' MSL. Rod on hangar 570' from departure end of runway, 278' left of centerline, 54' AGL/5054' MSL. Multiple trees beginning 787' from departure end of runway, 165' right of centerline, up to 70' AGL/5098' MSL. Multiple transmission lines beginning 4602' from departure end of runway, 1664' right of centerline, 80' AGL/5159' MSL. **Rwy 34,** multiple transmission lines beginning 2242' from departure end of runway, 964' left of centerline, up to 80' AGL/5159' MSL.

ARCO, ID

ARCO-BUTTE COUNTY (AOC)

AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE: Use JATTS DEPARTURE.

ARLINGTON, WA

ARLINGTON MUNI

TAKE-OFF MINIMUMS: **Rwy 11,** 600-2 or std. with a min. climb of 350' per NM to 700. **Rwy 34,** 500-2 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 11,** turn right. **Rwy 16**, climb direct to WATON LOM. **Rwys 29,34**, turn left. **All aircraft** climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR

ASTORIA RGNL

TAKE-OFF MINIMUMS: **Rwy 8**, 800-3 or std. with a min. climb of 320' per NM to 900. **Rwy 13**, 700-2 or std. with a min. climb of 350' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 8,31,** turn left. **Rwy 13**, climb runway heading to 800 then climbing right turn. **Rwy 26**, turn right. Aircraft departing northwestbound climb via AST R-290 on course. **All other aircraft** climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA

AUBURN MUNI

DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR

AURORA STATE

DEPARTURE PROCEDURE: **Rwy 17**, turn right, thence... **Rwy 35**, turn left, thence... ...Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight.

NOTE: **Rwy 17,** multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. **Rwy 35,** multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT

BAKER MUNI

NOTE: **Rwy 13,** 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. **Rwy 31,** 146' antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY ,OR

BAKER CITY MUNI

TAKE-OFF MINIMUMS: **Rwy 8**, 900-2 or std. with a min. climb of 315' per NM to 6000, (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). **Rwy 13**, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). **Rwy 17**, NA. **Rwy 31**, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K). **Rwy 35**, CAT C,D 1000-2; or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).

DEPARTURE PROCEDURE: **Rwys 8,13**, turn left. **Rwys 26,31,35,** turn right. **All aircraft** climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA

BELLINGHAM INTL

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. **Rwy 34,** climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

NOTE: **Rwy 16,** lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. **Rwy 34,** lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/169' MSL. multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR

BEND MUNI (BDN)
AMDT 4 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD

TAKE-OFF MINIMUMS: **Rwys 8,26,** NA.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 8400 via BPI R-124. **Rwy 31,** climb to 10800 via BPI R-320 thence all aircraft climb on course.

BILLINGS, MT

BILLINGS LOGAN INTL (BIL)
AMDT 5 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10R,** NA- Obstacles.
DEPARTURE PROCEDURE: **Rwy 10L,** Climb heading 098° to 4600 before turning right.
NOTE: **Rwy 10L,** fence 466' from departure end of runway, 535' right of centerline, 11' AGL/3511' MSL, cars on road, beginning from 624' from departure end of runway, 427' right of centerline, 15' AGL/3523' MSL, ground beginning 21' from departure end of runway, 499' right of centerline, 0' AGL/3505' MSL. **Rwy 25,** airport security fence, abeam departure end of runway, 500' left of centerline, 11' AGL/3672' MSL to 1200' from departure end of runway, abeam rwy centerline, 11' AGL/3672' MSL.

BLACKFOOT, ID

MCCARLEY FIELD

DEPARTURE PROCEDURE: **Rwy 1,** climb to 7000 (or higher assigned altitude) direct IDA VOR/DME, before proceeding on course. **Rwy 19,** climb to 7000 (or higher assigned altitude) direct PIH VORTAC, before proceeding on course.

BOISE,ID

BOISE AIR TERMINAL (GOWEN FIELD)

DEPARTURE PROCEDURE: **Rwys 28L,28R,** turn left **Rwys 10L,10R**, turn right. Climb on BOI R-214 within 20 NM to cross BOI VORTAC at or above MEA/MCA for direction of flight.

BOZEMAN,MT

GALLATIN FIELD (BZN)
AMDT 3 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-ATC.
DEPARTURE PROCEDURE: **Rwys 12, 30,** use BOZEMAN DEPARTURE.

BREMERTON,WA

BREMERTON NATIONAL (PWT)
AMDT 3 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. w/ min. climb of 410' per NM to 700.
DEPARTURE PROCEDURE: **Rwy 1,** Climbing right turn to 6000 direct CAN NDB, Thence...**Rwy 19,** Climb to 6000 direct CAN NDB, thence...
...Continue climb-in-hold (S, LT, 013° inbound) to 6000 before proceeding on course.
NOTES: **Rwy 1,** Multiple bushes 380' from departure end of runway, 522' left of centerline, up to 17' AGL/456' MSL, multiple trees and poles beginning 1210' from departure end of runway, 622' left of centerline, up to 100' AGL/561' MSL, multiple trees and bushes 1012' from departure end of runway, 708' right of centerline, up to 100' AGL/495' MSL. **Rwy 19,** Multiple trees beginning 176' from departure end of runway, 337' left of centerline, up to 100' AGL/514' MSL, multiple trees beginning 371' from departure end of runway, 277' right of centerline, up to 100' AGL/548' MSL.

BUFFALO,WY

JOHNSON COUNTY

TAKE-OFF MINIMUMS: Northbound aircraft: **Rwys 13,31,** 2400-2 or std. with a min. climb of 300' per NM to 7500. Southbound aircraft: **Rwy 31**, 400-2 or std. with a min climb of 300' per NM to 6000.
DEPARTURE PROCEDURE: Northbound aircraft: **Rwy 13**, turn left. **Rwy 31,** climb straight ahead. **All aircraft** proceed via SHR R-139 to SHR VORTAC. Southbound aircraft: **Rwy 13,** climb straight ahead. **Rwy 31,** turn right. **All aircraft** proceed via CZI R-319 to CZI VOR/DME.

BURLEY, ID

BURLEY MUNI

TAKE-OFF MINIMUMS: **All runways,** cross departure end of runway at or above 35' AGL.
DEPARTURE PROCEDURE: **All runways,** climb direct BURLEY (BYI) VOR/DME. Continue climb on R-305 within 10 miles to cross BYI VOR/DME: R-024 CW R-054 at or above 5500; R-055 CW R-240 at or above 8000; R-241 CW R-023 at or above 5900.
NOTE: **Rwy 2,** bridge 252' from departure end of runway, 513' left of centerline, 110' AGL/4195' MSL. Stack 2205' from departure end of runway, 857' right of centerline, 79' AGL/4236' MSL. Elevator 4092' from departure end of runway, 297' right of centerline, 133' AGL/4283' MSL. **Rwy 20,** antenna 523' from departure end of runway, 338' right of centerline, 43' AGL/4217' MSL. **Rwy 24**, tree 630' from departure end of runway, 521' right of centerline, 41' AGL/4215' MSL. Grain elevator 3106' from departure end of runway, 163' left of centerline, 137' AGL/4317' MSL.

BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)
ORIG-A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 340' per NM to 3600. **Rwy 10**, 1700-2 or std. with a min. climb of 245' per NM to 2300. **Rwy 22**, 1300-2 or std. with a min. climb of 210' per NM to 1800.
DEPARTURE PROCEDURE: **Rwys 4,10,22**, turn right heading 280°. **Rwy 28**, climb runway heading. **All aircraft** climb to 2500 then turn right direct BVS NDB to cross BVS at or above 4500. Aircraft departing on BVS R-145 CW R-330 climb on course. All others continue climbing in BVS holding pattern (NW, right turns 113° inbound) to cross BVS at or above 6800 before proceeding on course.
NOTE: **Rwy 4,** tree 2581' from departure end of runway, 426' left of centerline, 100' AGL/212' MSL. Light pole 1489' from departure end of runway, 136' left of centerline 35' AGL/137' MSL. Bush 126' from departure end of runway, 430' right of centerline, 20' AGL/101' MSL. Building 2925' from departure end of runway, 130' left of centerline, 60' AGL/180' MSL.

BURNS, OR

BURNS MUNI

DEPARTURE PROCEDURE: **Rwy 3,** climbing right turn, thence... **Rwy 12**, climb to 4600 via heading 117°, thence... **Rwys 21, 30,** climbing left turn, thence... ...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

NOTE: **Rwy 21,** pole 820' from departure end of runway, 357' left of centerline, 20' AGL/4169' MSL.

BUTTE, MT

BERT MOONEY

TAKE-OFF MINIMUMS: **Rwy 11**, NA-obstacles. **Rwy 15,** std. w/ min. climb of 601' per NM to 7300, or 3300-3 for climb in visual conditions. **Rwy 29,** std. w/ min. climb of 832' per NM to 6700, or 3300-3 for climb in visual conditions. **Rwy 33,** std. w/ min. clim b of 355' per NM to 6800, or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15,** climbing right turn direct CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .**Rwy 29,** climb heading 293° to intercept CPN VOR/DME R-082 to CPN VOR/DME, or for climb in visual conditions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . . **Rwy 33,** climb direct CPN VOR/DME, or for climb in visual condtions: Cross Bert Mooney Airport westbound at or above 8800 then proceed direct CPN VOR/DME, thence. . .

. . .climb in CPN VOR/DME holding pattern (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA before proceeding enroute.

NOTE: **Rwy 15,** multiple trees beginning 2 NM from departure end of runway, 1779' right of centerline, up to 100' AGL/6659' MSL. Tree 2.1 NM from departure end of runway, 66' left of centerline, 100' AGL/5934' MSL. **Rwy 29,** multiple trees and poles beginning 364' from departure end of runway, 7' right of centerline, up to 100' AGL/5621' MSL. Multiple trees and lights beginning 322' left of centerline, up to 100' AGL/5582' MSL. Terrain and numerous trees beginning 1.2 NM from departure end of runway, 1022' left of centerline, up to 100' AGL/6 379' MSL. **Rwy 33,** flag pole 1095' from departure end of runway, 730' left of centerline, 64' AGL/ 5583' MSL.

CALDWELL, ID

CALDWELL INDUSTRIAL

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course. **Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

NOTE: **Rwy 12,** levee 198' from departure end of runway, 281' left of centerline, 0' AGL/2451' MSL. Multiple trees 1462' from departure end of runway, 877' right of centerline, up to 100' AGL/2505' MSL. **Rwy 30,** multiple poles 206' from departure end of runway, 389' right of centerline, up to 39' AGL/2457' MSL. Rod 353' from departure end of runway, 246' right of centerline, 21' AGL/2439' MSL.

CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

AMDT 3A 09155 (FAA)

DEPARTURE PROCEDURE: **Rwys 3,8,12**, turn left. **All other runways,** turn right. **All aircraft** climb direct DDY VORTAC before proceeding on course, or comply with published Casper SIDs.

CHEHALIS, WA

CHEHALIS-CENTRALIA

DEPARTURE PROCEDURE: **Rwy 16,** climb to 1000 via heading 160° then climbing left turn to 4000 via heading 001° and OLM R-151 to OLM VORTAC before proceeding on course. **Rwy 34,** climb to 4000 via heading 340° and OLM R-176 to OLM VORTAC before proceeding on course.

CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD

NOTE: **Rwy 13,** multiple trees beginning 74' from departure end of runway, 115' left of centerline, up to 40' AGL/6166' MSL. Multiple trees, pole, and fence beginning 34' from departure end of runway, 167' right of centerline, up to 40' AGL/6154' MSL. **Rwy 27,** multiple trees and poles beginning 525' from departure end of runway, 271' left of centerline, up to 40' AGL/6216' MSL. Multiple trees and poles beginning 1222' from departure end of runway, 275' right of centerline, up to 40' AGL/ 6211' MSL. **Rwy 31.** multiple trees, road, fence and sign beginning 196' from departure end of runway, 76' left of centerline, up to 40' AGL/6238' MSL. Multiple poles and sign beginning 407' from departure end of runway, 8' left of centerline, up to 69' AGL/6229' MSL.

CODY, WY

YELLOWSTONE RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 1500-2 or std. with a min. climb of 250' per NM to 6800. **Rwy 22**, 1600-2 or std. with a min. climb of 340' per NM to 6200.

DEPARTURE PROCEDURE: **Rwys 4, 22**, turn left. **All aircraft** climb direct COD VOR/DME. Climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above: COD R-350 CW R-170, 6000; or R-171 CW R-349, 11800.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FLD

TAKE-OFF MINIMUMS: **Rwy 5**, CAT A,B, 1700-2 or std. with a min. climb of 230' per NM to 4000. CAT C,D, 2600-2 or std. with a min. climb of 320' per NM to 5400.

DEPARTURE PROCEDURE: **Rwys 1,5**, turn left, climb via COE R-005 to 5400, reverse course, continue climb direct COE VOR. **Rwy 19**, turn right. **Rwy 23,** turn left, climb via COE R-232 to 5000, reverse course, continue climb direct COE VOR.

COLSTRIP, MT

COLSTRIP (M46)

AMDT 2 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6** use CISPU (RNAV) DEPARTURE. **Rwy 24,** use CONUK (RNAV) DEPARTURE.

CONRAD, MT

CONRAD

DEPARTURE PROCEDURE: **Rwy 24,** climb runway heading to 4300, then continue climb on course.

CORVALLIS, OR

CORVALLIS MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** std. with a min. climb of 290' per NM to 3100 or 1700-3 for climb in visual conditions. **Rwy 27,** std. with a min. climb of 310' per NM to 3100 or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 9, 17,** climbing left turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400. **Rwys 27, 35,** climbing right turn direct CVO VOR/DME, thence...or, climb in visual conditions to cross CVO VOR/DME at or above 3400.

...climb in CVO VOR/DME holding pattern (E, RT, 261° inbound) to depart at or above 3400.

NOTE: **Rwy 9,** multiple trees and railroad beginning 549' from departure end of runway, 254' left of centerline, up to 153' AGL/383' MSL. Multiple trees and railroad beginning 670' from departure end of runway, 5' right of centerline, up to 135' AGL/380' MSL. **Rwy 27,** obstruction light on glideslope 409' from departure end of runway, 325' left of centerline, 28' AGL/273' MSL. **Rwy 35,** multiple trees beginning 470' from departure end of runway, 544' left of centerline up to 36' AGL/276' MSL.

COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY

DEPARTURE PROCEDURE: **Rwys 9, 27**, aircraft departing via HCY NDB bearings 130° CW 225° climb on course, all others climb in HCY NDB holding pattern (W, right turns, 078° inbound) to cross HCY NDB at or above 9000.

DEER PARK, WA

DEER PARK

TAKE-OFF MINIMUMS: **Rwy 4,** 3000-2 or std. with a min. climb of 360' per NM to 5600.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading; **Rwy 22,** climbing left turn to heading 130°; **Rwys 4,34,** climbing right turn to heading 210°; **All aircraft** intercept and continue climb via the 170° bearing from DPY NDB to intercept GEG R-006 to GEG VORTAC.

DILLON, MT

DILLON

TAKE-OFF MINIMUMS: **Rwys 3,21,** NA.

DEPARTURE PROCEDURE: **Rwys 16,34**, turn right, climb in DLN VOR/DME holding pattern (N, right turns, 185° inbound) to cross DLN VOR/DME at or above; northwestbound V257 8500; southwestbound V121 8500; northbound V21 7600; southeastbound V21, V257 9400.

DOUGLAS, WY

CONVERSE COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 300-2 or std. with a min. climb of 250' per NM to 5200. **Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME. **Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME. **Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME. **Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME. **All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.

NOTE: **Rwy 5,** trees 1883' from departure end of runway, 549' right of centerline, 35' AGL/5014' MSL. Trees 3407' from departure end of runway, 209' right of centerline, 35' AGL/5074' MSL. Trees 5458' from departure end of runway, 1954' right of centerline, 35' AGL/5132' MSL. **Rwy 23,** trees 2068' from departure end of runway, 1008' left of centerline, 35' AGL/4994' MSL. Trees 3130' from departure end of runway, 1215' left of centerline, 35' AGL/5014' MSL.

DRIGGS, ID

DRIGGS-REED MEMORIAL (DIJ)

AMDT 2 08157 (FAA)

DEPARTURE PROCEDURE: Use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

AMDT 1 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** NA-Terrain. **Rwy 34,** 500-3 or std. w/ min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 34,** climbing right turn to 2000 to intercept HUH VORTAC R-210 to HUH VORTAC, then climb-in-hold (hold South, Left turns, 352° inbound) to cross HUH VORTAC at or above 3800 before proceeding on course.

NOTE: **Rwy 34,** trees beginning 330' from DER, 411' left of centerline, up to 120' AGL/139' MSL.

ELLENSBURG, WA

BOWERS FIELD

TAKE-OFF MINIMUMS: **Rwys 7,11,** 4600-3 or std. with a min. climb of 290' per NM to 7800. **Rwy 25,** 4700-3 or std. with a min. climb of 340' per NM to 7800. **Rwy 29,** 4600-3 or std. with a min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE: **Rwys 7, 29,** climbing right turn direct ELN VORTAC. **Rwys 11, 25,** climbing left turn direct ELN VORTAC. **All aircraft,** continue climbing in the ELN VORTAC holding pattern (W, right turns, 087° inbound) to MEA/MOCA for route of flight.

EPHRATA, WA

EPHRATA MUNI (EPH)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 027° to 2300 before proceeding on course. **Rwy 11,** climb heading 112° to 2200 before proceeding on course. **Rwy 21,** climb heading 207° to 2800 before proceeding on course.

EUGENE, OR

MAHLON SWEET FIELD

DEPARTURE PROCEDURE: **Rwys 16L, 16R,** climb to 1000 then climbing right turn...**Rwys 34L, 34R,** climb to 1000 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in EUG VORTAC holding pattern (hold north, right turn, 175° inbound) to cross EUG VORTAC at or above MEA altitude before proceeding enroute.

NOTE: **Rwy 16R,** tree 1992' from departure end of runway, 832' left of centerline, 50' AGL/419' MSL. **Rwy 16L,** multiple trees and power poles beginning 872' from departure end of runway, 35' right of centerline, up to 50' AGL/437' MSL, multiple trees and power poles beginning 890' from departure end of runway, 77' left of centerline, up to 50' AGL/433' MSL. **Rwy 34R,** multiple trees beginning 2869' from departure end of runway, 186' right of centerline, up to 50' AGL/447' MSL. Tree 2535' from departure end of runway, 652' left of centerline, 50' AGL/428' MSL.

EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

Rwy 23, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

All aircraft: cross FBR VOR/DME at or above MEA for direction of flight.

EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 353' per NM to 800.

DEPARTURE PROCEDURE: **Rwys 11, 16L/R,** climbing right turn, thence...**Rwys 29, 34L/R,** climbing left turn, thence...

...for aircraft departing via V287 west bound, climb via PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

NOTE: **Rwy 11,** multiple antennas on building, rod on obstruction light, and trees beginning 326' from departure end of runway, 387' right of centerline, up to 85' AGL/664' MSL. Tree 1156' from departure end of runway, 600' left of centerline, 93' AGL/672' MSL. **Rwy 16L,** multiple trees and pole beginning 588' from departure end of runway, 220' left of centerline, up to 118' AGL/697' MSL. Multiple trees, pole, and building beginning 449' from departure end of runway, 162' right of centerline, up to 78' AGL/657' MSL. **Rwy 16R,** multiple trees beginning 1228' from departure end of runway, 168' left of centerline, up to 140' AGL/699' MSL. Multiple trees beginning 707' from departure end of runway, 158' right of centerline, up to 118' AGL/687' MSL. **Rwy 29,** multiple trees beginning 45' from departure end of runway, 66' left of centerline, up to 111' AGL/630' MSL. Multiple trees beginning 343' from departure end of runway, 44' right of centerline, up to 110' AGL/689' MSL. **Rwy 34R,** multiple trees and pole beginning 3340' from departure end of runway, 180' right of centerline, up to 95' AGL/674' MSL. Tree 5762' from departure end of runway, 221' left of centerline, 103' AGL/682' MSL.

FAIRCHILD AFB (KSKA)

SPOKANE, WA . . . . . ORIG, 08017

DEPARTURE PROCEDURES: **Rwy 5**, climb on track 048° to intercept SKA R-045 to 5300, then on course. **Rwy 23**, climb on track 241° to 3400, then on course.

TAKE-OFF OBSTACLES: **Rwy 23**, Terrain 2468' MSL, 194' from DER, 405' right of centerline. Terrain 2477' MSL, 461' from DER, 751' right of centerline. Terrain 2477' MSL, 509' from DER, 750' right of centerline.

FORT BENTON, MT

FORT BENTON

TAKE-OFF MINIMUMS: **Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

FORT BRIDGER, WY

FORT BRIDGER

DEPARTURE PROCEDURE: **All aircraft** climb direct FBR VOR/DME. Aircraft departing; FBR R-210 CW R-135 climb on course; FBR R-136 CW R-209 cross FBR VOR/DME at or above 9000. (Hold NE, right turns, 215° inbound).

FRIDAY HARBOR, WA

FRIDAY HARBOR

TAKE-OFF MINIMUMS: **Rwy 34,** 500-1.

DEPARTURE PROCEDURE: Aircraft departing FHR NDB **Rwy 34,** climbing right turn direct FHR NDB, then climb on course. All other aircraft climb on course.

GILLETTE, WY

GILLETTE-CAMPBELL COUNTY (GCC)
AMDT 4 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 275' per NM to 5600, or 1200-3 for climb in visual conditions. **Rwy 21,** 600-3 or std. w/ min. climb of 425' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 158° to 5100, before proceeding on course or, for climb in visual conditions cross Gillette-Campbell County airport at or above 5400 before proceeding on course. **Rwy 21,** climb via heading 206° to 5200, before proceeding on course.

NOTE: **Rwy 3,** windsock 1415' from DER, 100' left of centerline, 24' AGL/4366' MSL. Trees beginning 1976' from DER, 267' right of centerline, up to 30' AGL/4409' MSL. **Rwy 16,** tower and poles beginning 1.61 NM from DER, 1264' left of centerline, up to 57' AGL/4696' MSL. Post and trees beginning 1.77 NM from DER, 300' right of centerline, up to 51' AGL/4789' MSL. **Rwy 21,** fence 328' from DER, 267' left of centerline, 7' AGL/4352' MSL, trees 2077' from DER, 1011' right of centerline, 30' AGL/4449' MSL, tree 7029' from DER, 2378' right of centerline, 30' AGL/4729' MSL. **Rwy 34,** fence 1236' from DER, 723' left of centerline, 16' AGL/4380' MSL. Vehicle on road 1609' from DER, 419' left of centerline, 15' AGL/4394' MSL. Trees 3093' from DER, 936' right of centerline, 30' AGL/4449' MSL. Vehicle on road 1610' from DER. 419' left of centerline, 15' AGL/4380' MSL.

GOODING, ID

GOODING MUNI (GNG)
ORIG 08269 (FAA)

DEPARTURE PROCEDURE: **Rwy 7,** climb heading 068° to 5000 before turning left. **Rwy 25,** climb heading 233° to 5600 before turning right.

NOTE: **Rwy 7,** rising terrain 59' from departure end of runway, 479' right of centerline, up to 3754' MSL. Fence line 653' from departure end of runway, 332' right of centerline, 12' AGL up to 3751' MSL. Bushes starting 877' from departure end of runway, 420' right of centerline, 20' AGL up to 3795' MSL. **Rwy 25,** vehicle on road, 91' from departure end of runway, 257' left of centerline, up to 10' AGL/3678' MSL.

GRANGEVILLE, ID

IDAHO COUNTY (S80)
AMDT 1 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** NA - Obstacles.

DEPARTURE PROCEDURE: **Rwy 25,** Use MELLR DEPARTURE.

GRANTS PASS, OR

GRANTS PASS

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30,** 4000-3 or std. with a min. climb of 360' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 30,** climb via heading 320 until passing 5000, then climbing right turn direct RBG VOR/DME. Cross RBG VOR/DME at or above MEA for route of flight.

GRAY AAF (KGRF)

FORT LEWIS, WA

. . . . . Rwy 15, 300-1*
Rwy 33, 300-1**

* Or standard with minimum climb of 430/NM to 500.
** Or standard with minimum climb of 380/NM to 600.
Rwy 15 climb runway heading to 700 then climbing left turn direct GR LOM. Rwy 33 climb runway heading direct GR LOM. Aircraft departing 330° CW 070° and 135° CW 260° bearing from GR LOM climb on course. All others continue climb in GR holding pattern (Hold NW, RT, 147° inbound) to cross GR LOM at or above: 071° CW 134° bearing from GR LOM, 8500; 261° CW 329° bearing from GR LOM, 1500.

GREAT FALLS, MT

GREAT FALLS INTL

NOTE: **Rwy 7,** obstruction light on lighted wind sock 237' from departure end of runway, 519' left of centerline, 34' AGL/3694' MSL. Obstruction light on building 2226' from departure end of runway, 614' left of centerline, 78' AGL/3738' MSL. Building on 681' from departure end of runway, 583' right of centerline, 48' AGL/3688' MSL. Multiple light poles beginning 1359' from departure end of runway, 440' right of centerline, up to 90' AGL/3746' MSL. **Rwy 21,** pole 1544' from departure end of runway, 791' left of centerline, 45' AGL/3725' MSL. **Rwy 25,** windmill 2.3 NM from departure end of runway, 4197' right of centerline, 338' AGL/4003' MSL.

GREYBULL, WY

SOUTH BIG HORN COUNTY (GEY)
ORIG-A 09239 (FA)

TAKE-OFF MINIMUMS: **Rwy 25,** 300-1 or std. w/ min. climb of 260' per NM to 4200.

DEPARTURE PROCEDURE: **All runways**, for departures on GEY bearings 320° CW 150°, climb in GEY NDB holding pattern to 9000 before departing on course, then continue climb to MEA or assigned altitude. Departures GEY bearings 150° CW 320° climb on course.

NOTE: **Rwy 25,** bush 4955' from DER, 1268' right of centerline, 2' AGL/4101' MSL.

GUERNSEY, WY

CAMP GUERNSEY

TAKE-OFF MINIMUMS: **Rwy 14,** 300-1 or std. with a min. climb of 320' per NM to 4700. **Rwy 32,** 1400-2 or std. with a min. climb of 320' per NM to 5800.

DEPARTURE PROCEDURE: **Rwy 14,** climb to 5600 via heading 150°. **Rwy 32,** climb to 5800 via heading 070°. **All aircraft** continue on course.

HAILEY, ID

FRIEDMAN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 13,** 2700-3 w/ min. climb of 307' per NM to 6400, or 3600-3 for climb in visual conditions. **Rwy 31,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 13,** Climbing right turn heading 149°, then on 160° course to HLE NDB, or for climb in visual conditions: cross Friedman Memorial Airport at or above 8800 heading 151°, then on 151° course to HLE NDB.

NOTE: **Rwy 13,** multiple trees beginning 763' from departure end of runway, 3' right of centerline, up to 100' AGL/5345' MSL. Multiple trees beginning 1.3 NM from departure end of runway, 2587' right of centerline, up to 100' AGL/6099' MSL.

HAMILTON, MT

RAVALLI COUNTY

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HAVRE,MT

HAVRE CITY-COUNTY (HVR)
AMDT 3 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence...**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence...**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...

...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.

NOTE: **Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL. **Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL. Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL. Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL. **Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL. Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

HELENA, MT

HELENA RGNL (HLN)
ADMT 9 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 2500-3 or std. w/ min. climb of 250' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 9,** std. w/ min. climb of 240' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 23,**1600-3 or std. w/ min. climb of 560' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwy 27**,1600-3 or std. w/ min. climb of 390' per NM to 8100, or 1600-3 for climb in visual conditions. **Rwys 16,34,** NA.

DEPARTURE PROCEDURE: **Rwys 5,9,** climbing left turn heading 270°. **Rwys 23,27,** climbing right turn heading 020°. **All Aircraft:** continue climb northwestbound via HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000, before proceeding on course, or for climb in visual conditions: cross Helena Rgnl airport northbound at or above 5300 and continue climbing via HLN R-336 to WOKEN INT before proceeding on course.

NOTE: **Rwy 5,** ground beginning 5' from departure end of runway, 495' right of centerline, up to 3826' MSL. Fence beginning 423' from departure end of runway, 331' right of centerline, up to 10' AGL/3832' MSL**. Rwy 23,** pole 2198' from departure end of runway, 462' left of centerline, 76'AGL/3996' MSL, tree 1011' from departure end of runway, 379' left of centerline, 44'AGL/3964' MSL, rod on building 953' from departure end of runway, 321' left of centerline, 323' AGL/943' MSL, tree 1519' from departure end of runway, 142' right of centerline, 53' AGL/3953' MSL. **Rwy 27,** buildilng 1593' from departure end of runway, 731' left of centerline, 58'AGL/6385' MSL. Ground beginning 101' from departure end of runway, 346' left of centerline, up to 3871' MSL. Tree 1567' from departure end of runway, 616' left of centerline, 47' AGL/ 3906' MSL.

HERMISTON, OR

HERMISTON MUNI

NOTE: **Rwy 4,** tower 379' left of departure end of runway, 50' AGL/698' MSL. **Rwy 22,** light pole 456' left of departure end of runway, 44' AGL/684' MSL.

HOQUIAM, WA

BOWERMAN

TAKE-OFF MINIMUMS: **Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 6,** climbing right turn heading 110°: **Rwy 24,** climb runway heading. **All aircraft** climb to 600 continue climb on course.

HULETT, WY

HULETT MUNI (W43)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course. **Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from departure end of runway to 7700 before proceeding on course.

NOTE: **Rwy 13,** road 398' from departure end of runway, 37' left of centerline, 15' AGL/4296' MSL, truck on road 1126' from departure end of runway, 346' right of centerline, 15' AGL/4334' MSL, trees beginning 4945' from departure end of runway, across centerline, up to 100' AGL/4657' MSL. **Rwy 31,** terrain 104' from departure end of runway, 420' left of centerline, 4200' MSL, terrain 344' from departure end of runway, 233' left of centerline, 4207' MSL.

IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)
AMDT 4 09351 (FAA)

DEPARTURE PROCEDURE: **All aircraft** departing IDA R-160 CW R-040 climb on course. **All others** climb direct IDA VOR/DME. Continue climb in IDA holding pattern (South, left turns, 019° inbound) to cross IDA VOR/DME at or above 7500 before proceeding on course.

NOTE: **Rwy 2,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL. **Rwy 17,** trees, flagpole, building, light and vent on buildings, and vehicle on road beginning 29' from DER, 10' right of centerline, up to 84' AGL/4820' MSL. Trees and vent on building beginning 569' from DER, 22' left of centerline, up to 35' AGL/4760' MSL. Trees, antenna, and light poles beginning 1853' from DER, 26' right of centerline, up to 121' AGL/4851' MSL. **Rwy 35,** trees and railroad beginning 410' from DER, 503' right of centerline, up to 49' AGL/4769' MSL. Tree 1034' from DER, 715' left of centerline, 42' AGL/4762' MSL.

JACKSON,WY

JACKSON HOLE

DEPARTURE PROCEDURE: **Rwy 1,** use GEYSER DEPARTURE. **Rwy 19,** use TETON DEPARTURE.

JEROME, ID

JEROME COUNTY (JER)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 500-1¾ or std. w/ min. climb of 435' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 086° to 5300 before proceeding on course. **Rwy 27**, climb heading 266° to 4800 before proceeding on course.

NOTE: **Rwy 9,** bush 140' from DER, 500' left of centerline, 16' AGL/4076' MSL. Poles starting 1432' from DER, 32' left of centerline, up to 47' AGL/4169' MSL. Sign 1473' from DER, 547' left of centerline, 49' AGL/4119' MSL. Obstruction light on building 1510' from DER, 6' left of centerline, 43' AGL/4103' MSL. Trees starting 1651' from DER, 100' left of centerline, up to 53' AGL/4137' MSL. Building 2186' from DER, 173' left of centerline, 29' AGL/4119' MSL. Rising terrain starting 2549' from DER, 560' left of centerline, up to 4219' MSL. AG equip 4752' from DER, 517' left of centerline, 26' AGL/4175' MSL. Poles starting 600' from DER, 254' right of centerline, up to 48' AGL/4173' MSL. **Rwy 27,** fence starting 18' from DER, 440' left of centerline, up to 9' AGL/3969' MSL.

JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

AMDT 1 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 17, 35,** NA, Terrain.

DEPARTURE PROCEDURE: **Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VORTAC, climb in IMB VORTAC holding pattern (E, right turns, 280° inbound) to cross IMB VORTAC at or above MEA for route of flight.

NOTE: **Rwy 27,** fence beginning 195' from departure end of runway, 50' right of centerline, up to 16' AGL/3665' MSL. Trees beginning 229' from departure end of runway, 261' right of centerline, up to 26' AGL/3662' MSL. Bush 389' from departure end of runway, 438' right of centerline, 20' AGL/3659' MSL.

KALISPELL, MT

GLACIER PARK INTL

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL

TAKE-OFF MINIMUMS: **Rwy 12,** NA. **Rwy 30**, 1200-2 or std. with a min. climb of 320' per NM to 1300.

DEPARTURE PROCEDURE: Departure procedure limited to CAT A,B aircraft. **Rwy 30**, climb straight ahead to 1500 then climbing right turn direct LSO NDB. Continue climb in holding pattern (N, right turns, 171° inbound) to cross LSO NDB at or above 3000 direct BTG VORTAC or MEA for route of flight.

KEMMERER, WY

KEMMERER MUNI (EMM)

AMDT 1 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,10,22,28,** NA - Rwy surfaces.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 12000 via heading 166° and FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course. **Rwy 34,** climb via heading 346° to 8200 then climbing right turn to12000 via heading 125° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.

KLAMATH FALLS, OR

KLAMATH FALLS

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 14**, 1100-3 or std. with a min. climb of 275' per NM to 5500. **Rwy 25**, 3300-3 or std. with a min. climb of 250' per NM to 7400. **Rwy 32**, 2000-3 or std. with a min. climb of 320' per NM to 6300.

DEPARTURE PROCEDURE: **Rwys 14,25**, climb via runway heading to 6000 then climbing right turn direct LMT VORTAC, thence... **Rwy 32**, climb via runway heading to 5500 then climbing left turn direct LMT VORTAC, thence... climb in LMT holding pattern (W, right turns, 070° inbound) to cross LMT VORTAC at or above 8000.

LA GRANDE, OR

LA GRANDE/UNION COUNTY

TAKE-OFF MINIMUMS: **Rwy 12**, Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800. **Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800. **Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100. **Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 12**,**16,** climbing left turn direct LGD NDB, thence; **Rwys 30,34,** climbing right turn heading 010°, thence; **all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

LAKEVIEW, OR

LAKE COUNTY

TAKE-OFF MINIMUMS: **Rwy 16,** 3700-5 or std. with a min. climb of 320' per NM to 8800. **Rwy 34,** 2500-5 or std. with a min. climb of 320' per NM to 8500.

DEPARTURE PROCEDURE: **Rwy 16**, climbing right turn via LKV R-163 to LKV VORTAC. **Rwy 34**, climbing left turn heading 320° to intercept LKV R-148 then via LKV R-148 to LKV VORTAC. **All aircraft** continue climbing in the LKV VORTAC holding pattern (NW, right turns, 148° inbound) to MEA for route of flight.

LARAMIE, WY

LARAMIE RGNL

DEPARTURE PROCEDURE: **Rwy 3**, turn left. **Rwys 12,21**, turn right. **All aircraft** climb direct LAR VORTAC, continue climb in holding pattern (W, left turns, 107° inbound) to cross LAR VORTAC at or above: westbound V4, 10600. All others cross LAR VORTAC at or above MEA for direction of flight.

LAUREL, MT

LAUREL MUNI

TAKE-OFF MINIMUMS: **Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE: **Rwy 22**, turn left. **All aircraft** climb direct BIL VORTAC.

LEWISTON,ID

LEWISTON-NEZ PERCE COUNTY

DEPARTURE PROCEDURE: **Rwys 8,11,26,29**, turn left direct MQG VOR/DME. Continue climb in holding pattern (W, left turns, 066° inbound) to cross MQG VOR/DME at or above 3600.

LEWISTOWN,MT

LEWISTOWN MUNI

TAKE-OFF MINIMUMS: **Rwy 2,** 1800-2 or std. with a min. climb of 280' per NM to 6900. **Rwy 7,12,** 900-2 or std. with a min. climb of 220' per NM to 6200.

DEPARTURE PROCEDURE:**Rwys 2,30** turn left. **Rwys 7,12,20**, turn right. **Rwy 25**, climb runway heading. **All aircraft** climb direct LWT VORTAC. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

LEXINGTON, OR

LEXINGTON

TAKE-OFF MINIMUMS: **Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions. **Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

NOTES: **Rwy 8,** trees 1.42 NM from departure end of runway, 2386' left of centerline, 100' AGL/2159' MSL. Trees 1.48 NM from departure end of runway, 2755' left of centerline, 100' AGL/2179' MSL.

LIBBY, MT

LIBBY

TAKE-OFF MINIMUMS: **Rwy 33,** not authorized. **Rwy 15,** use EYESE RNAV DEPARTURE.

LIVINGSTON, MT

MISSION FIELD (LVM)

AMDT 3 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8,13,26,31,** NA-Enivironmental.

DEPARTURE PROCEDURE: **Rwys 4, 22,** use LIVINGSTON DEPARTURE.

MADRAS, OR

MADRAS MUNI (S33)

ORIG-A 09043 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 298' per NM to 3900 or 1100-2½ for climb in visual conditions. **Rwy 22,** std. w/ a min. climb of 281' per NM to 3900 or 1100-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 4, 34,** climbing left turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course. **Rwy 16,** climbing right turn heading 210° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . .**Rwy 22,** climb heading 216° and DSD R-348 to DSD VORTAC to 7000 before proceeding on course, or. . . . . .for climb in visual conditions: cross Madras Muni at or above 3400 MSL, then direct DSD VORTAC to 7000 before proceeding on course.

MC CALL, ID

MC CALL MUNI (MYL)

AMDT 2 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16**, use MCCALL DEPARTURE.

MC CHORD AFB (KTCM)

TACOMA, WA 09127

DEPARTURE PROCEDURE: **Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight. **Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLES: **Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline. Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline. Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline. Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline. Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline. Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline. Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline. **Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline. Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline. Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline. Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)
AMDT 4 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard take-off minimums and normal 200'/NM climb gradient, take-off must occur no later than 2000' prior to departure end of runway. **Rwy 17,** std. w/ min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions. **Rwy 22,** std. w/ min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

Rwy 17,22, climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ... or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course. **Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...

... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

NOTE: **Rwy 4,** multiple trees beginning 2040' from departure end of runway, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL. **Rwy 17,** tree 1719' from departure end of runway, 456' right of centerline, 100' AGL/231' MSL. Tree 1760' from departure end of runway, 627' left of centerline, 100' AGL/257' MSL. **Rwy 22,** multiple trees beginning 282' from departure end of runway, 120' left and 144' right of centerline, up to 100' AGL/246' MSL. Tree 4047' from departure end of runway, 1319' left of centerline, 100' AGL/284' MSL. **Rwy 35,** multiple trees beginning 1551' from departure end of runway, 229' right of centerline, up to 100' AGL/277'MSL.

MEDFORD,OR

ROGUE VALLEY INTL-MEDFORD (MFR)
AMDT 9 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Obstacles. **Rwy 14**, std. w/ min. climb of 430' per NM to 4600, or 2900-3 for climb in visual conditions. **Rwy 32,** std. with a min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

Rwy 32, climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl airport at or above 4100 before proceeding direct OED VORTAC...

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above 6400.

MISSOULA, MT

MISSOULA INTL (MSO)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwys 11, 29,** use GRZLY DEPARTURE.

MOSES LAKE, WA

GRANT COUNTY INTL

NOTE: **Rwy 14R,** antenna 3902' from departure end of runway, 828' right of centerline, 98' AGL/1268' MSL. **Rwy 18,** pole 405' from departure end of runway, 334' right of centerline, 30' AGL/1209' MSL. Windsock 496' from departure end of runway, 371' left of centerline, 16' AGL/1195' MSL. **Rwy 32L,** pole 1326' from departure end of runway, 373' left of centerline, 22' AGL/1202' MSL.

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID 07270

Rwy 12, 30, 6700-3*

* Or standard with minimum climb of 270/NM to 9100.

TAKE-OFF OBSTACLES: **Rwy 12**, Terrain 0' AGL/3028' MSL, 1224' from DER, 744' right of centerline. Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline. Terrain 0' AGL/3035' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3022' MSL, 49' from DER, 202' right of centerline. Terrain 0' AGL/3018' MSL, 148' from DER, 328' left of centerline. Terrain 0' AGL/3016' MSL, 300' from DER, 580' left of centerline. Road/Vehicle 15' AGL/3044' MSL, 1147' from DER, 794' right of centerline. Power pole 35' AGL/3069' MSL, 2914' from DER, 940' right of centerline. Tower 30' AGL/3032' MSL, 1067' from DER, 902' right of centerline. Tower 28' AGL/3039' MSL, 1172' from DER, 796' right of centerline. Tower 45' AGL/3054' MSL, 2152' from DER, 1478' left of centerline. **Rwy 30**, Terrain 0' AGL/2995' MSL, 40' from DER, 492' left of centerline. Terrain 0' AGL/2999' MSL, 370' from DER, 467' right of centerline. Terrain 0' AGL/3006' MSL, 507' from DER, 636' right of centerline. Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline. Road/Vehicle 35' AGL/3019' MSL, 954' from DER, 773' left of centerline.

MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI

TAKE-OFF MINIMUMS: **Rwy 10,** 3500-2 or std. with a min. climb of 305' per NM to 7300. **Rwy 28,** 3500-2 or std. with a min. climb of 290' per NM to 7300.

DEPARTURE PROCEDURE: **Rwy 10,** climbing left turn direct STI NDB. **Rwy 28,** climbing right turn direct STI NDB. **All aircraft** departing STI NDB bearing 080° CW 340° climb on course. All others continue climb in hold (E, left turns, 271° inbound) to cross STI NDB at or above 7300.

NAMPA, ID

NAMPA MUNI

DEPARTURE PROCEDURE: **Rwy 11**, climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course. **Rwy 29,** climb runway heading to 3700 then climbing right turn direct MPA NDB, continue climb in MPA holding pattern (NW, right turns, 145° inbound). Depart MPA NDB at or above 5500 before proceeding on course.

NOTE: **Rwy 11,** 70' AGL tree, 1225' from departure end of runway, 90' right of centerline.

NEWCASTLE, WY

MONDELL FIELD (ECS)

AMDT 3A 09267 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,17,23,35,** NA. **Rwy 13,** 200-1 or std. with a min. climb of 275' per NM to 4400. **Rwy 31,** 300-1 or std. with a min. climb of 300' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 31,** climbing left turn. **All aircraft** climb to 5500 via ECS R-143, then climbing right turn direct ECS VOR, continue climb on course.

NOTE: **Rwy 13,** fence posts, beginning 299' from DER, 218' left of centerline, up to 10' AGL/ 4190' MSL. Light on antenna 1951' from DER, 879' left of centerline, 84' AGL/4244' MSL. **Rwy 31,** multiple poles, beginning 74' from DER, 237' right of centerline, up to 20' AGL/ 4200' MSL. Bush 5787'from DER, 1441' right of centerline, 13' MSL/4363' MSL. Railroad 735'from DER, 314' right of centerline 30'AGL/4202' MSL. Road 207'from DER, 254'right of centerline, 15' AGL/4187'MSL.

NEWPORT,OR

NEWPORT MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, NA. **Rwy 16**, 500-2 or std. with a min. climb of 310' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 2,** NA. **Rwy 16,** turn right. **Rwy 34**, turn left. Aircraft departing via ONP R-180 CW R-320 depart on course. All others continue climbing via ONP R-200 to 1500 then climbing left turn direct ONP VORTAC. Cross ONP VORTAC at or above 2200.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

AMDT 4B 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 800-2 or std. with a min. climb of 340' per NM to 900. **Rwy 13,** 800-2. **Rwys 16,34,** NA-Rwy closed. **Rwy 31,** 300-2 or std. with a min. climb of 240' per NM to 400.

DEPARTURE PROCEDURE: **Rwys 4,31,** turn left. **Rwys 13, 22**, turn right. **All aircraft** climb via OTH VORTAC R-250 to 1300 then climbing right turn direct OTH VORTAC.

NOTE: **Rwy 13,** spire 3468' from departure end of runway, 1128' left of centerline, 55' AGL/243' MSL, multiple trees beginning 3068' from departure end of runway, 78' left of centerline, up to 132' AGL/291' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

ORIG-A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1. **Rwy 25,** 300-1

DEPARTURE PROCEDURE: **Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course. **Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

NOTE: **Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL. Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL. Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL. Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL. **Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL. Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

OLYMPIA, WA

OLYMPIA RGNL (OLM)

AMDT 5A 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2 or std. with a min. climb of 706' per NM to 600, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 085° to 1000 then climbing left turn direct OLM VORTAC, thence. . .**Rwy 17,** climb heading 172° to 1200 then climbing right turn direct OLM VORTAC, thence. . .or climb in visual conditions to cross OLM VORTAC at or above 2300, thence. . . **Rwy s 26,35,** climbing right turn direct OLM VORTAC, thence. . .

. . .continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** multiple trees beginning 880' from DER, 214' left of centerline, up to 100' AGL/343' MSL. Multiple trees beginning 1636' from DER, 131' right of centerline, up to 100' AGL/320' MSL. **Rwy 17,** multiple trees beginning 1008' from DER, 24' left of centerline, up to 100' AGL/490' MSL. Multiple trees beginning 752' from DER, 3' right of centerline, up to 100' AGL/370' MSL. **Rwy 26,** multiple trees and WSK on building beginning 475' from DER, 595' left of centerline, up to 100' AGL/330' MSL. Multiple trees beginning 338' from DER, 339' right of centerline, up to 100' AGL/309' MSL. **Rwy 35,** multiple trees beginning 2176' from DER, 198' left of centerline, up to 100' AGL/313' MSL. Multiple trees and field light on hangar beginning 657' from DER, 621' right of centerline, up to 100' AGL/315' MSL.

OMAK, WA

OMAK

TAKE-OFF MINIMUMS: **Rwy 17,** 2200-2 or std. with a min. climb of 300' per NM to 4200. **Rwy 35,** NA.

DEPARTURE PROCEDURE: **Rwy 17,** use GETNG RNAV DEPARTURE. **Rwy 35,** NA.

ONTARIO,OR

ONTARIO MUNI (ONO)

AMDT 3 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 32**, climb to 9600 on a heading between 010° CW to 141° from departure end of runway or minimum climb of 280' per NM to 9600 for all other courses.

NOTE: **Rwy 14,** multiple trees, poles, and buildings beginning 90' from departure end of runway, 157' right of centerline up to 120' AGL/2314' MSL. Multiple trees, poles, and buildings beginning 502' from departure end of runway, 506' left of centerline up to 120' AGL/2314' MSL. **Rwy 32,** multiple trees, poles, and buildings beginning 340' from departure end of runway, 405' left of centerline up to 100' AGL/2458' MSL. Multiple trees, poles, and buildings beginning 2' from departure end of runway, 472' right of centerline up to 100' AGL/2431' MSL.

PASCO, WA

TRI-CITIES

DEPARTURE PROCEDURE: **All runways**, climb runway heading to 1000, thence... **Rwy 12**, turn left. All others turn right. **All aircraft** climb direct PSC VOR/DME before proceeding on course.

PENDLETON, OR

EASTERN OREGON RGNL AT PENDLETON (PDT)

AMDT 3 09183 (FAA)

DEPARTURE PROCEDURE: **Rwys 7, 29, 34,** climbing left turn direct PDT VORTAC, thence...
Rwys 11, 16, climbing right turn direct PDT VORTAC, thence...
Rwy 25, climb direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 073° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

NOTE: **Rwy 16,** multiple trees beginning 232' from DER, 348' right of centerline, up to 100' AGL/1579' MSL. **Rwy 25,** multiple antennas and terrain beginning 203' from DER, 259' left of centerline, up to 13' AGL/1512' MSL. **Rwy 29,** terrain 189' from DER, 247' left of centerline, 1493' MSL.

PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

AMDT 2 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course. **Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

PLENTYWOOD, MT

SHER-WOOD

NOTE: **Rwy 12,** multiple bushes beginning 47' from departure end of runway, 71' left of centerline, up to 12' AGL/2251' MSL. Multiple bushes beginning 362' from departure end of runway, 514' right of centerline, up to 12' AGL/ 2251' MSL. **Rwy 30,** multiple bushes and road beginning 68' from departure end of runway, 75' right of centerline, up to 12' AGL/2303' MSL. Multiple bushes beginning 217' from departure end of runway, 60' left of centerline, up to 12' AGL/2296' MSL.

POCATELLO, ID

POCATELLO RGNL (PIH)

AMDT 7 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON

TAKE-OFF MINIMUMS: **Rwy 18**, N/A-extremely precipitous terrain. **Rwy 36**, standard with a min. climb of 270' per NM to 8400'.

DEPARTURE PROCEDURE: **Rwy 36**, Use ANGIL RNAV DEPARTURE.

NOTES: **Rwy 36**, Road 509' from departure end of runway, 2955' MSL. Trees 2.39 NM from departure end of runway, 3383' left of centerline, 100' AGL/3179 MSL. Rapidly rising precipitous terrain left and right of centerline running along southern Flathead River ridges.

PORT ANGELES, WA

PORT ANGELES CGAS

DEPARTURE PROCEDURE: Copter departure, climb from landing area direct to EDIZ HOOK NDB. Continue climb in holding pattern (NE, right turns, 237° inbound) to MEA for direction of flight.

WILLIAM R FAIRCHILD INTL

DEPARTURE PROCEDURE: **Rwys 8,13, 26, 31**, use WATTR FIVE DEPARTURE.

PORTLAND, OR

PORTLAND INTL (PDX)

AMDT 6 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** 500-3 or std. w/ min. climb of 400' per NM to 600. **Rwy 10L/R,** std. w/ min. climb of 270' per NM to 2900. **Rwy 21,** std. w/ min. of 310' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 025° to 700, then climbing left turn direct BTG VORTAC, thence ... **Rwys 10L,10R,** climb heading 099° to 500, then climbing left turn direct BTG VORTAC, thence ... **Rwy 21,** climb heading 205.03 to 500, then climbing right turn direct BTG VORTAC, thence ... **Rwys 28L,28R,** climb heading 279° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

NOTE: **Rwy 3,** signs, tower, trees, and vehicle on road beginning 468' from departure end of runway, 28' left of centerline, up to 100' AGL/449' MSL. Poles, trees, and vehicle on road beginning 609' from departure end of runway, 7' left of centerline, up to 100' AGL/416' MSL. **Rwy 10L,** rising terrain and vehicle on road beginning 7' from departure end of runway, 376' left of centerline, up to 17' AGL/60' MSL. **Rwy 10R,** pole 1996' from departure end of runway, 758' right of centerline, 54' AGL/74' MSL. note: **Rwy 21,** trees beginning 1319' from departure end of runway,155' right of centerline, up to 100' AGL/318' MSL. Poles and trees beginning 353' from departure end of runway, 36' left of centerline, up to 100' AGL/317' MSL. **Rwy 28L,** trees 1873' from departure end of runway, 836' left of centerline, 50' AGL/88' MSL. **Rwy 28R,** multiple signs, poles, and vehicle on road beginning 876' from departure end of runway, 654' right of centerline, up to 27' AGL/69' MSL.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO

TAKE-OFF MINIMUMS: **Rwy 30,** 200-1¼ or std. with a min. climb of 223' per NM to 500. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct UBG VOR/DME...**Rwys 2, 20, 30,** climbing left turn direct UBG VOR/DME...

...all aircraft climb in UBG VOR/DME holding pattern (west, right turn, 108° inbound) to cross UBG VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

NOTE: **Rwy 2,** multiple roads beginning 246' from departure end of runway, 3' right of centerline, up to 15' AGL/220' MSL. **Rwy 12,** multiple trees beginning 1842' from departure end of runway, 222' left of centerline, up to 125' AGL/324' MSL. Multiple trees beginning 3629' from departure end of runway, 46' right of centerline, up to 143' AGL/332' MSL. **Rwy 20,** multiple trees and pole beginning 967' from departure end of runway, 118' left of centerline, up to 93' AGL/292' MSL. Vent of hangar 63' from departure end of runway, 428' left of centerline, 26' AGL/225' MSL. Multiple trees and antenna on building beginning 965' from departure end of runway, 449' right of centerline, up to 74' AGL/273' MSL. **Rwy 30,** multiple trees beginning 1664' from departure end of runway, 623' right of centerline, up to 194' AGL/363' MSL. Pole 702' from departure end of runway, 603' left of centerline, 26' AGL/215' MSL.

PORTLAND-TROUTDALE

TAKE-OFF MINIMUMS: **Rwy 7,** 3600-2 or std. with a min. climb of 380' per NM to 4100. **Rwy 25**, 900-2 or std. with a min. climb of 360' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 7**, turn left. **Rwy 25**, turn right. **All aircraft** climb via BTG R-125 direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000; all others 2500.

POWELL, WY

POWELL MUNI

TAKE-OFF MINIMUMS: **Rwy 3,16,21,34**, NA.

DEPARTURE PROCEDURE: **Rwy 13**, turn right. **Rwy 31**, turn left. **All aircraft** climb direct COD VOR/DME. Aircraft departing COD R-350 CW R-170 climb on course. All others continue climb in COD VOR/DME holding pattern (N, left turns, 189° inbound) to cross COD VOR/DME at or above 8800

PRINEVILLE, OR

PRINEVILLE (S39)

AMDT 1 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 350 feet per NM to 6500, or 2400-3 for climb in visual conditions. **Rwy 15,** std. w/ min. climb of 470' per NM to 6200, or 2400-3 for climb in visual conditions. **Rwy 28,** std. w/ min. climb of 450' per NM to 6700, or 2400-3 for climb in visual conditions. **Rwy 33,** std. w/ min. climb of 380' per NM to 6700, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 102° to 6500 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 15,** climb heading 154° to 6200 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 28,** climb heading 282° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course. **Rwy 33,** climb heading 334° to 6700 before proceeding on course or for climb in visual conditions cross Prineville Muni airport at or above 5600 before proceeding on course.

NOTE: **Rwy 10,** trees beginning 2693' from departure end of runway, 545' right of centerline, up to 100' AGL/3339' MSL. **Rwy 15,** trees beginning 1129' from departure end of runway, 697' right of centerline, up to 100' AGL/3319' MSL**. Rwy 28,** trees beginning 1803' from departure end of runway, 74' right of centerline, up to 100' AGL/3319' MSL. **Rwy 33,** trees beginning 2636' from departure end of runway, 379' right of centerline, up to 100' AGL/ 3319' MSL.

PULLMAN-MOSCOW, WA

PULLMAN-MOSCOW RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ with a min. climb of 278' per NM to 4400, or 4600-3 for climb in visual conditions. **Rwy 23**, 300-1 or std. with a min. climb of 361' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn direct PUW VOR/DME, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight, or for climb in visual conditions; cross Pullman-Moscow Rgnl at or above 4500. **Rwy 23,** climbing left turn via PUW VOR/DME R-021, cross PUW VOR/DME at or above 4700, continue climb in PUW VOR/DME holding pattern (SW, left turn, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

NOTE: **Rwy 5,** multiple trees and terrain left and right of centerline, beginning 614' from departure end of runway, 424' right of centerline up to 50' AGL/2677' MSL. Terrain 3503' from departure end of runway, 770' left of centerline, 50' AGL/2608' MSL. **Rwy 23,** multiple trees, terrain, fences, poles, and tanks beginning 669' from departure end of runway, 412' right of centerline, up to 52' AGL/2769' MSL.

PUYALLUP, WA

PIERCE COUNTY-THUN FIELD (PLU)

AMDT 1A 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16, 34,** 300-1.

DEPARTURE PROCEDURE: **Rwy 16,** climbing right turn. **Rwy 34,** climb runway heading. **All aircraft** climb via SEA R-158 to COTNY INT/SEA 18.1 DME. Continue in COTNY holding pattern (Hold S, left turns, 338° inbound) to depart COTNY at or above: 001° CW 090° 3500, 090° 3500, 091°CW 120° 10,400, 121° CW 170° 2700, 171° CW 360° 1500.

NOTE: **Rwy 16,** light pole 511' from DER, 567' right of centerline, 40' AGL/552' MSL. Multiple poles on building beginning 187' from DER, 416' left of centerline, up to 575' MSL. Multiple trees beginning 363' from DER, 656' left of centerline to 540' right of centerline, up to 662' MSL. Vehicles on road beginning 1149' from DER, 512' right of centerline, up to 15' AGL/582' MSL. Terrain beginning 1293' from DER, 529' left of centerline to 352' right of centerline, up to 581' MSL. Pipe 1520' from DER, 303' left of centerline, 574' MSL. **Rwy 34,** multiple trees beginning 58' from DER, 591' left of centerline to 1029' right of centerline, up to 694' MSL. Flagpole 1155' from DER, 464' left of centerline, 578' MSL. Building 564' from DER, 410' left of centerline, 555' MSL.

RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD

TAKE-OFF MINIMUMS: **Rwy 4**, 600-2 or std. with a min. climb of 440' per NM to 7500. **Rwy 22**, 1500-2 or std. with a min climb of 365' per NM to 8700. **Rwys 10, 28**, NA.

DEPARTURE PROCEDURE: **Rwy 4,** turn right. **Rwy 22**, turn left. Climb to 10000 via RWL R-200 and CKW R-080 to CKW VOR/DME then via assigned route. Aircraft departing eastbound V4 or V6 climb via RWL R-200 to assigned route then climb on course.

REDMOND, OR

ROBERTS FIELD (RDM)

AMDT 5 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** std. w/ min. climb of 269' per NM to 4700. **Rwy 28,** std. w/ min. climb of 276' per NM to 4800.

DEPARTURE PROCEDURE: **Rwy 4,** climbing left turn via heading 265° and DSD R-047 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 10,** climbing right turn via heading 240° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 22,** climb heading 222° and DSD R-090 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course. **Rwy 28,** climbing left turn via heading 275° and DSD R-045 to DSD VORTAC, climb in DSD VORTAC holding pattern (hold North, right turn, 168° inbound) to cross DSD VORTAC at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 28,** numerous trees beginning 1' from DER, 356' right of centerline, 12' AGL/3079' MSL. Tree 364' from DER, 448' left of centerline, 15' AGL/3054' MSL.

RENTON, WA

RENTON MUNI (RNT)

AMDT 7 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 405' per NM to 800, or 1100-2½ for climb in visual conditions. **Rwy 34**, 500-2¾ or std. with a min. climb of 315' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 16,** climb heading 157° to 700, then climbing right turn direct SEA VORTAC, thence..., or for climb in visual conditions: cross Renton Muni Airport westbound at or above 1000 MSL, then proceed on SEA R-029 to SEA VORTAC, thence... **Rwy 34,** Climb heading 337° to 700, then climbing left turn direct SEA VORTAC thence ... ...Climb in SEA VORTAC holding pattern (East, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for direction of flight.

NOTES: **Rwy 16,** trees, towers, lights and blast shield beginning 185' from DER, 4' left of centerline, up to 100' AGL/574' MSL. Trees, lights and sign beginning 40' from DER, 54' right of centerline, up to 100' AGL/297' MSL. **Rwy 34,** Trees and terrain beginning 1.6 NM from DER, 104' left of centerline, up to 100' AGL/485' MSL. Trees, terrain and wood piling beginning 75' from DER, 7' right of centerline, up to 100' AGL/426' MSL.

REXBURG, ID

REXBURG-MADISON COUNTY

DEPARTURE PROCEDURE: **Rwy 17**, climbing right turn. **Rwy 35,** climbing left turn. **All aircraft** climb via IDA VOR/DME R-015 to RIGBY Int to MEA for route of flight before proceeding on course.

NOTE: **Rwy 17,** 100'AGL trees 125' from departure end of runway, 350' left of centerline. **Rwy 35,** 100' AGL trees 350' from departure end of runway, 450' right of centerline. 100' AGL trees 750' from departure end of runway, 500' left of centerline.

RICHLAND, WA

RICHLAND

TAKE-OFF MINIMUMS: **Rwy 1,** 200-1 or std. w/ min. climb of 310' per NM to 700. **Rwy 19,** std. w/ min. climb of 480' per NM to 2300, or 1800-2½ for climb in visual conditions. **Rwy 26,** 500-2½ or std. w/ min. climb of 309' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn via heading 070° and PSC R-301 to PSC VOR/DME, thence...**Rwy 8,** climbing right turn direct PSC VOR/DME, thence...**Rwy 19,** climbing right turn via heading 040° and PSC R-269 to PSC VOR/DME, or for climb in visual conditions: cross Richland Airport at or above 2000 then proceed on PSC R-269, to PSC VOR/DME thence...**Rwy 26,** climbing right turn via heading 070° and PSC R-287 to PSC VOR/DME, thence...

...climb in PSC VOR/DME holding pattern (hold East, right turn, 291° inbound) to cross PSC VOR/DME at or above MEA for route of flight before proceeding on course.

NOTE: **Rwy 1,** crane and multiple poles 752' from departure end of runway, 477' right of centerline, up to 110' AGL/520' MSL. Trees 43' from departure end of runway, 414' left of centerline, 100' AGL/407' MSL. **Rwy 8,** multiple trees and railroad beginning 400' from departure end of runway, 252' right of centerline, up to 100' AGL/469' MSL. Multiple trees and railroad beginning 204' from departure end of runway, 241' left of centerline, up to 100' AGL/469' MSL. **Rwy 19,** multiple trees 64' from departure end of runway, 169' right of centerline, up to 100' AGL/679' MSL. Multiple trees, terrain, and buildings 22' from departure end of runway, 30' left of centerline, up to 100' AGL/479' MSL. **Rwy 26,** multiple trees, fence, and terrain beginning 458' from departure end of runway, 230' left of centerline, up to 100' AGL/839' MSL. Multiple posts, antenna, and terrain beginning 164' from departure end of runway, 255' right of centerline, up to 18' AGL/417' MSL.

RIVERTON, WY

RIVERTON RGNL

DEPARTURE PROCEDURE: Aircraft departing RIW R-280 CW R-170 climb on course. All others climb to 6600, then continue climb direct RIW VOR/DME to cross RIW VOR/DME at or above 7500 before proceeding on course.

ROCK SPRINGS, WY

ROCK SPRINGS-SWEETWATER COUNTY

DEPARTURE PROCEDURE: Climb direct OCS VORTAC. Aircraft departing OCS R-205 CW R-170 climb on course. All others climb in the OCS holding pattern (E, right turns, 260°inbound) to cross OCS VORTAC at or above 7300.

RONAN, MT

RONAN (7S0)

ORIG 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions. **Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course. **Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

NOTE: **Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL. **Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL. Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

ROSEBURG, OR

ROSEBURG RGNL (RBG)
AMDT 5A 08297 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, std. with a min. climb of 642' per NM to 2000, or 1700-3 for climb in visual conditions. **Rwy 34,** std. with a min. climb of 760' per NM to 2000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb direct RBG VOR/DME, or climb in visual conditions to cross Roseburg Airport southbound at or above 2200, then direct RBG VOR/DME. Then via RBG R-157 and right turn direct RBG VOR/DME to cross at or above the MCA or MEA for route of flight. **Rwy 34,** climb via heading 342° to 4000, or climb in visual conditions to cross Roseburg Airport northbound at or above 2200 and then via heading 342° to 4000. Then climbing left turn direct RBG VOR/DME, to cross RBG VOR/DME at or above MCA or MEA for route of flight. Aircraft that have not reached the MCA or MEA for route of flight continue climb via RBG R-157 and right turn direct RBG VOR/DME.

NOTE: **Rwy 16,** tower 1.56 NM from departure end of runway, 2231' right of centerline, 50' AGL/1201' MSL, tree 1.47 NM from departure end of runway, 1560' right of centerline, 21' AGL/980' MSL, tree 1.46 NM from departure end of runway, 1298' right of runway centerline, 45' AGL/964' MSL, pole 1.36 NM from departure end of runway, 921' right of centerline, 75' AGL/914' MSL, rod on airway beacon 1.29 NM from departure end of runway, 409' right of centerline, 52' AGL/891' MSL, tree 655' from departure end of runway, 347' right of runway centerline, 93' AGL/593' MSL, obstruction light on pole 691' from departure end of runway, 187' right of runway centerline, 117' AGL/557' MSL. **Rwy 34,** tree 1.10 NM from departure end of runway, 2003' left of runway centerline, 60' AGL/1179' MSL. Tree 5165' from departure end of runway, 1744' left of centerline, 64' AGL/1023' MSL. Obstruction light on pole 4850' from departure end of runway, 56' left of centerline, 15' AGL/894' MSL. Tree 4785' from depature end of runway, 48' left of runway centerline, 23' AGL/862' MSL. Tree 1.41 NM from departure end of runway, 1826' left of runway centerline, 17' AGL/896' MSL. Tree 4079' from departure end of runway, 508' left of runway centerline, 21' AGL/780' MSL. Tree 5067' from departure end of runway, 265' right of centerline, 43' AGL/802' MSL. Tree 4260' from departure end of runway, 345' right of centerline, 42' AGL/761' MSL. Tree 1465' from departure end of runway 329' right of runway centerline, 100' AGL/642' MSL. Tree 913' from departure end of runway, 217' right of runway centerline, 100' AGL/622' MSL. Tree 647' from departure end of runway, 345' right of runway centerline, 100' AGL/615' MSL. Hill 1065' from departure end of runway, 299' right of runway centerline 608' MSL. Trees beginning 60' from departure end of runway, 117' left of runway centerline, up to 16' AGL/554' MSL. Trees beginning 242' from departure end of runway, 209' right of runway centerline, up to 56' AGL/584' MSL. Vehicle on road 265' from departure end of runway, 229' right of runway centerline, 15' AGL/560' MSL. Multiple signs beginning 792' from departure end of runway, 550' left of runway centerline, up to 60' AGL/565' MSL. Bush 94' from departure end of runway, 228' right of runway centerline, 19' AGL/547' MSL. Bush 202' from departure end of runway, 92' left of centerline, 7' AGL/535' MSL. Pole 640' from departure end of runway, 354' left of runway centerline, 29' AGL/557' MSL.

SALEM, OR

MCNARY FIELD

TAKE-OFF MINIMUMS: **Rwy 13**, 600-2 or std. with a min. climb of 240' per NM to 800. **Rwy 16**, 600-2 or std. with a min. climb of 340' per NM to 800.

DEPARTURE PROCEDURE: Comply with SIDs or; **Rwys 31, 34**, turn right. **Rwy 16**, turn left. **Rwy 13**, climb heading 130°. **All aircraft** climb direct TURNO LOM/Int. Continue climb in holding (SE, left turns, 310° inbound) to cross TURNO LOM/INT at or above MEA for route of flight.

SALMON, ID

LEMHI COUNTY

TAKE-OFF MINIMUMS: **Rwy 17,** NA. **Rwy 35,** 4300-5 or std. with a min. climb of 390' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 17,** NA. **Rwy 35,** climb runway heading to 8000, then climbing left turn to 11,300 direct LKT VOR/DME before proceeding on course.

SANDPOINT, ID

SANDPOINT

TAKE-OFF MINIMUMS: **Rwy 1,** 4200-2 or std. with a min. climb of 520' per NM to 5800. **Rwy 19,** 2200-2 or std. with a min. climb of 480' per NM to 4600.

DEPARTURE PROCEDURE: **Rwy 1,** climbing right turn to COE VOR/DME via heading 200° and COE R-002. **Rwy 19,** climbing left turn to COE VOR/DME via heading 140° and COE R-002.

SARATOGA, WY

SHIVELY FIELD

TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with a min. climb of 220' per NM to 7400.

DEPARTURE PROCEDURE: **Rwy 5,** turn left heading 280°. **Rwy 23,** turn right heading 340°. **All aircraft** climb to 9000 via 310° bearing from SAA NDB then continue climb on course.

SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn direct BTG VORTAC. **Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

NOTE: **Rwy 15,** 158' MSL tree 470' from departure end of runway, 499' right of centerline. **Rwy 33,** cross departure end of runway 33 at or above 35' AGL/90' MSL. 130' MSL tree 613' from departure end of runway, 414' right of centerline; 142' MSL trees 1343' from departure end of runway, 348' right of centerline.

SCOBEY, MT

SCOBEY

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 280' per NM to 3400.

SEATTLE, WA

BOEING FIELD/KING COUNTY INTL

TAKE-OFF MINIMUMS: **Rwy 13L,** 500-3 w/ min. climb of 232' per NM to 800, or 1000-2½ for climb in visual conditions. **Rwy 13R,** std. w/ a min. climb of 476' per NM to 900, or 500-3 w/ a min. climb of 386' per NM to 900, or 1000-2½ for climb in visual conditions. **Rwy 31L,** std. w/ a min. climb of 386' per NM to 800, or 300-1½ w/ min. climb of 235' per NM to 800, or 1000-2 ½ for climb in visual conditions. **Rwy 31R,** std. w/ a min. climb of 334' per NM to 900, or 400-1¾ w/ min. climb of 216' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 13L/R,** climbing right turn. **Rwys 31L/R,** climbing left turn. All aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000. For climb in visual conditions cross Boeing Field/King County Intl Airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000.

NOTES: **Rwy 13L,** multiple trees, towers, antennas and building beginning 402' from departure end of runway, 411' left of centerline, up to 127' AGL/479' MSL. **Rwy13R,** multiple trees and poles beginning 35' from departure end of runway, 154' left of centerline, up to 66' AGL/485' MSL. Multiple trees and poles beginning 501' from departure end of runway, 3' right of centerline, up to 77' AGL/195' MSL. **Rwy 31L,** multiple trees, fence, and building beginning 250' from departure end of runway, 253' left of centerline, up to 71' AGL/101' MSL. Multiple trees and floodlights beginning 1245' from departure end of runway, 447' right of centerline, up to 71' AGL/239' MSL. **Rwy31R,** multiple trees, hangers, towers, poles and building beginning 12' from departure end of runway, 389' right of centerline, up to 103' AGL/350' MSL. Multiple obstruction lights beginning 214' from departure end of runway, 99' left of centerline, up to 71' AGL/101' MSL.

SEATTLE-TACOMA INTL (SEA)

AMDT 4 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 16L, 16C, 16R,** climb to 1000 via heading 163°, then climbing right turn direct SEA VORTAC, thence...
Rwys 34L, 34C, 34R, climb to 1000 via heading 343°, then climbing left turn direct SEA VORTAC, thence...
...climb in SEA VORTAC holding pattern (hold SE, left turns, 310° inbound) to MEA/MCA for route of flight.

NOTE: **Rwy 16L,** trees beginning 2908' from departure end of runway, 1064' right of centerline, up to 100' AGL/476' MSL. **Rwy 16C,** trees beginning 4477' from departure end of runway, 484' right of centerline, up to 100' AGL/507' MSL. **Rwy 16R,** trees, antenna on building and light pole beginning 488' from departure end of runway, 436' left of centelrine, up to 100' AGL/507' MSL. Trees beginning 1137' from departure end of runway, 587' right of centerline, up to 100' AGL/468' MSL. **Rwy 34L,** fence 189' from departure end of runway, 401' right of centerline, up to 12' AGL/420' MSL. Trees beginning 4010' from departure end of runway, 857' left of centerline, up to 100' AGL/522' MSL.

SHELBY, MT

SHELBY

TAKE-OFF MINIMUMS: **Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to departure end of runway.

NOTE: **Rwy 5,** fence post 320' from departure end of runway, 162' right of centerline, 12' AGL/3455' MSL, truck on road beginning 515' from departure end of runway, 632' right of centerline, 17' AGL/3498' MSL, tree 1 NM from departure end of runway, 1242' left of centerline, 75' AGL/3604' MSL. **Rwy 11,** truck on road 906' from departure end of runway, 691' left of centerline, 17' AGL/3456' MSL, tree 1697' from departure end of runway, 26' right of centerline, 75' AGL/3495' MSL, tree 1561' from departure end of runway, 322' left of centerline, 75' AGL/3514' MSL, light standard 852' from departure end of runway, 174' left of centerline, 22' AGL/3451' MSL.

SHELTON, WA

SANDERSON FIELD

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions. **Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000. **Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

NOTE: **Rwy 5,** multiple trees beginning 550' from departure end of runway, 107' left of centerline, up to 94' AGL/366' MSL. Multiple trees beginning 130' from departure end of runway, 70' right of centerline, up to 80' AGL/352' MSL. **Rwy 23,** multiple trees beginning 52' from departure end of runway, 149'left of centerline, up to 72' AGL/330' MSL. Multiple trees beginning 886' from departure end of runway, 153' right of centerline, up to 155' AGL/486' MSL.

SHERIDAN, WY

SHERIDAN COUNTY

TAKE-OFF MINIMUMS: **Rwy 5,** 700-3 or std. w/ min. climb of 318' per NM to 5100, or. . . **Rwy 14,** 800-3 or std. w/ min. climb of 263' per NM to 5100, or. . . **Rwy 23,** 900-3 or std. w/ min. climb of 348' per NM to 5100, or. . . . . .1400/3 for climb in visual conditions. Climb in visual conditions NA at night.

DEPARTURE PROCEDURE: **Rwy 5,** climbing left turn via SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 14,** climbing left turn via heading 320° and SHR R-106 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 23,** climbing right turn via SHR R-153 to SHR VORTAC, or climb in visual conditions to cross Sheridan County Airport northwestbound at or above 5300, then via SHR R-126 to SHR VORTAC, thence. . . **Rwy 32,** climb via heading 320° and SHR R-106 to SHR VORTAC, thence. . . . . .climb in holding pattern (hold northwest, left turn, 133° inbound) to cross SHR VORTAC at or above airway MEA for route of flight.

NOTE: **Rwy 5,** multiple trees beginning 101' from departure end of runway, 188' left of centerline, up to 80' AGL/3991' MSL. **Rwy 23,** fence 1201' from departure end of runway, 10' left of centerline, 20' AGL/4060' MSL. Building 1949' from departure end of runway, 415' left of centerline, 17' AGL/4077' MSL. Tree 3337' from departure end of runway, 391' right of centerline, 43' AGL/4143' MSL. **Rwy 32,** antenna 53' from departure end of runway, 398' right of centerline, 20' AGL/4020' MSL.

SIDNEY, MT

SIDNEY-RICHLAND MUNI

TAKE-OFF MINIMUMS: **Rwy 28**, 400-2 or std. with a min. climb of 260' per NM to 2300.

SNOHOMISH, WA

HARVEY FIELD (S43)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15R, 33L**, NA-obstacles. **Rwy 15L,** std. w/ min. climb of 353' per NM to 1100, or 1200-2½ for climb in visual conditions. **Rwy 33R,** std. w/ min. climb of 475' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ... **Rwy 33R,** climb on 329° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 329° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 339° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

NOTE**: Rwy 15L,** tree 81' from DER, 177' right of centerline, 40' AGL/106'MSL. Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL. **Rwy 33R,** powerline 139' from DER, 226' left of centerline, 40' AGL/56' MSL. Tree 298' from DER, 205' right of centerline, 104' AGL/121' MSL. Tower 5708' from DER, 1956' right of centerline, 206' AGL/300' MSL.

SPOKANE, WA

FELTS FIELD

TAKE-OFF MINIMUMS: **Rwys 3L,3R,** std. w/ min. climb of 400' per NM to 3600, or 1600-3 for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 360' per NM to 3100, or 1600-3 for climb in visual conditions. **Rwy 21R,** std. w/ min climb of 375' per NM to 3100, or 1600-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 3L, 3R,** climb to 3600, then climbing right turn heading 210° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course. **Rwys 21L, 21R,** climb to 2800, then climbing left turn heading 190° and GEG R-050 to GEG VORTAC, or for climb in visual conditions: cross Felts Field Airport southbound at or above 3400, then via GEG R -050 to GEG VORTAC. Cross GEG VORTAC at or above the MCA or MEA for route of flight, before proceeding on course.

NOTE: **Rwy 3L,** multiple trees beginning 5000' from departure end of runway, 530' left of centerline, up to 104' AGL/2513' MSL. Tree 1854' from departure end of runway, 773' right of centerline, 54' AGL/2030' MSL, tree 2365' from departure end of runway, 798' right of centerline, 61' AGL/2037' MSL. **Rwy 3R,** multiple trees beginning 5016' from departure end of runway, 1033' left of centerline, up to 104' AGL/2529' MSL, pole 2.5 NM from departure end of runway, 2059' left of centerline, 62' AGL/2454' MSL, hangar 92' from departure end of runway, 341' right of centerline, 5' AGL/1967' MSL, NDB 925' from departure end of runway, 270' right of centerline, 25' AGL/1987' MSL, multiple trees beginning 1870' from departure end of runway, 271' right of centerline, up to 128' AGL/3560' MSL. **Rwy 21L,** pole 316' from departure end of runway, 302' left of centerline, 33' AGL/1992' MSL, tree 926' from departure end of runway, 362' left of centerline, 50' AGL/2006' MSL, building 1057' from departure end of runway, 158' left of centerline, 19' AGL/1975' MSL, building 1061' from departure end of runway, 110' left of centerline, 19' AGL/1975' MSL. Elevator 4080' from departure end of runway, 598' left of centerline, 134' AGL/2080' MSL. **Rwy 21R,** hangar 204' from departure end of runway, 496' left of centerline, 13' AGL/1969' MSL, pole 659' from departure end of runway, 404' left of centerline, 26' AGL/1979' MSL, building, 946' from departure end of runway, 230' left of centerline, 24' AGL/1973' MSL, pole 1399' from departure end of runway, 2' left of centerline, 33' AGL/1982' MSL, elevator 2655' from departure end of runway, 1097' left of centerline, 134' AGL/2080' MSL, tree 189' from departure end of runway, 511' right of centerline, 46' AGL/1979' MSL, tree 480' from departure end of runway, 404' right of centerline, 43' AGL/1979' MSL, pole 1252' from departure end of runway, 55' right of centerline, 29' AGL/1975' MSL, pole 1427' from departure end of runway, 13' right of centerline, 33' AGL/1982' MSL.

SPOKANE INTL

DEPARTURE PROCEDURE: **All aircraft** climb direct GEG VORTAC. Continue climb via R-208 within 10 miles to cross GEG VORTAC at or above: northeastbound V120-448, 5200; eastbound V2, 5200, southeast thru westbound climb on course.

STEVENSVILLE, MT

STEVENSVILLE

TAKE-OFF MINIMUMS: **Rwy 12,** do not exceed 210 knots until established on MSO R-163. **Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course. **Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

SUNRIVER, OR

SUNRIVER

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400. **Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC. **Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

TACOMA, WA

TACOMA NARROWS

TAKE-OFF MINIMUMS: **Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE: **Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC. **Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI

TAKE-OFF MINIMUMS: **Rwy 2**, CAT A,B 1100-2 or std. with a min. climb of 350' per NM to 1500. CAT C,D 2600-3 or std. with a min. climb of 475' per NM to 3100. **Rwy 7**, 900-3 or std. with a min. climb of 330' per NM to 1200. **Rwy 12**, 1400-3 or std. with a min. climb of 500' per NM to 2000. **Rwy 20**, 1800-3 or std. with a min. climb of 470' per NM to 2200. **Rwy 25**, NA. **Rwy 30**, 2900-3 or std. with a min. climb of 500' per NM to 2700.

DEPARTURE PROCEDURE: **Rwys 2,7**, climbing right turn heading 120°. **Rwy 12**, climb via runway heading. **Rwys 20, 30**, climbing left turn heading 120°. **All aircraft** intercept and climb southbound via LTJ R-165 to 3500. Then climbing left turn direct LTJ VORTAC. Continue climb in LTJ holding pattern (E, right turns, 260° inbound) to cross LTJ VORTAC at or above MCA or MEA for route of flight.

TILLAMOOK, OR

TILLAMOOK

TAKE-OFF MINIMUMS: **Rwys 1, 13, 19,** NA. **Rwy 31,** 2000-3 or std. with a min. climb of 350' per NM to 4500.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19,** NA. **Rwy 31,** use FETUJ RNAV DEPARTURE.

TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL

TAKE-OFF MINIMUMS: **Rwy 12**, NA.

DEPARTURE PROCEDURE: Aircraft departing on TWF R-240 CW R-080 climb on course. All others climb runway heading 6000 then climbing turn direct TWF VORTAC. Climb in holding pattern (NW, right turns, 113° inbound) to MCA or MEA as appropriate for direction of flight.

VANCOUVER, WA

PEARSON FIELD (VUO)

AMDT 2 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** std. w/ min. climb of 358' per NM to 600, or 500-3 w/ min. climb of 201' per NM to 600, or 900-2½ for climb in visual conditions. **Rwy 26,** 600-3 or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 8,** climb heading 079° to 500 then climbing left turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .**Rwy 26,** climb heading 259° to 700 then climbing right turn direct BTG VORTAC, thence. . . or for climb in visual conditions: cross Pearson Field at or above 800 MSL then proceed on BTG VORTAC R-179 to BTG VORTAC, thence. . .

. . .continue climb in BTG VORTAC holding pattern (hold northwest, right turn, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

NOTE: **Rwy 8,** tree 1.4 NM from departure end of runway, 1283' left of centerline, 100' AGL/395' MSL. Tree 1.7 NM from departure end of runway, 701' left of centerline, 100' AGL/401' MSL. Tree 2 NM from departure end of runway, 849' left of centerline, 100' AGL/406' MSL. Tree 2.4 NM from departure end of runway, 648' left of centerline, 100' AGL/399' MSL. **Rwy 26,** bridge 2704' from departure end of runway, 587' left of centerline, 243' AGL/245' MSL. Crane 1.5 NM from departure end of runway, 2563' right of centerline, 237' AGL/267' MSL. Transmission line tower 2.5 NM from departure end of runway, 2036' right of centerline, 516' AGL/534' MSL.

WALLA WALLA, WA

WALLA WALLA RGNL

DEPARTURE PROCEDURE: **Rwys 2,7, 20,25,34,** turn left. **Rwy 16,** turn right. **All aircraft** climb to 2500 via ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

NOTE: **Rwy 16,** antenna 365' from departure end of runway, 97' right of centerline, 1155' MSL. Terrain 1' from departure end of runway 140' left of centerline, 1145' MSL. **Rwy 20,** light 666' from departure end of runway, 640' left of centerline, 1170' MSL. **Rwy 34,** terrain 213' from departure end of runway, 230' right of centerline, 1130' MSL.

WEISER, ID

WEISER MUNI (S87)

ORIG 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions. **Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 12,** climb heading 121° to 3900 before proceeding on course. **Rwy 30,** climb heading 301° to 4000 before proceeding on course ...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.

NOTE: **Rwy 12,** tree 248' from departure end of runway, 443' right of centerline, 100' AGL/2184' MSL. **Rwy 30,** tree 1907' from departure end of runway, 769' right of centerline, 100' AGL/2174' MSL.

WENATCHEE, WA

PANGBORN MEMORIAL

TAKE-OFF MINIMUMS: **Rwy 7**, NA. **Rwy 12,** 1500-2 or std. with a min. climb of 510' per NM to 2900. **Rwys 25, 30**, CAT A,B 1600-2 or std. with a min. climb of 360' per NM to 3100. CAT C,D 5500-3 or std. with a min. climb of 570' per NM to 7200.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading. **Rwys 25, 30,** climbing left turn. **All aircraft** climb via EAT R-113 to 4000 then climbing left turn direct EAT VOR/DME. Aircraft departing EAT R-010 CW R-140 climb on course. All others continue climb in EAT VOR/DME holding pattern (E,right turns,253° inbound) to cross EAT VOR/DME at or above: R-141 CW R-200 7400; R-201 CW R-009, 8200.

WEST YELLOWSTONE, MT

YELLOWSTONE

TAKE-OFF MINIMUMS: **Rwy 19**, 2200-2 or std. with a min. climb of 245' per NM to 8900. FAR 135 AUTH: **Rwy 1,** ½ mile.

DEPARTURE PROCEDURE: **Rwy 1**, turn right. **All aircraft** climb direct TARGY LOM. Aircraft departing TARGY LOM on bearing 190° CW 220° climb on course. All others climb south on bearing 190° within 10 NM of TARGY LOM turn left and continue climbing direct TARGY LOM to cross TARGY LOM at or above: bearing 360° CW 190° 9300, bearing 220° CW 360° 10500

WHEATLAND, WY

PHIFER AIRFIELD

DEPARTURE PROCEDURE: **Rwy 8,** climbing left turn to 9000 via heading 030° to intercept IIP VOR/DME R-140 to JEZZY Int, thence. . .**Rwy 26,** climbing right turn to 9000 via heading 360° and GYZ NDB course 051° to JEZZY INT, thence. . .

. . .continue climb-in-hold (hold northwest, right turn, 140° inbound) to 9000 before proceeding on course.

NOTE: **Rwy 8,** multiple trees 512' from departure end of runway, 584' left of centerline, 100' AGL/4859' MSL. **Rwy 26,** multiple trees, buildings, poles/lights, siren, roads w/ vehicles beginning 2' from departure end of runway, on centerline, to 488' left of centerline, 100' AGL/4899' MSL. Multiple trees, buildings, poles/lights, roads w/ vehicles beginning 2' from departure end of runway, on centerline to 499' right of centerline, 100' AGL/4859' MSL.

WHIDBEY ISLAND NAS (AULT FIELD) (NUW)

OAK HARBOR, WA. 07186

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 430'/NM until 600. Climbing left turn to 2000, intercept NUW R-067, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, intercept NUW R-128, expect radar vectors to join assigned route. **Rwy 25**: Climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route. CIVIL DEPARTURE PROCEDURE: **Rwy 7**: Minimum climb of 270'/NM until 700. Climbing left turn to 2000 via heading 067°, expect radar vectors to join assigned route. **Rwy 14**: Climbing left turn to 2000, via heading 128°, expect radar vectors to join assigned route. **Rwy 25**: Use published DP or climb to 2000 via heading 249°, expect radar vectors to join assigned route. **Rwy 32**: Climb to 2000 via heading 317°, expect radar vectors to join assigned route. **ALL RWYS:** If vectors are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route. TAKEOFF OBSTACLES: **Rwy 7:** Terrain, 7813' from DER, 2469' left of centerline, 276' MSL. Trees, 4274' from DER, 5472' left of centerline, 472' MSL. Trees, 5239' from DER, 6257' left of centerline, 495' MSL. Trees, 8561' from DER, 3685' left of centerline, 426' MSL. Trees, 12,561' from DER, 4814' right of centerline, 462' MSL. Terrain, 11,843' from DER, 7129' left of centerline, 502' MSL. Trees, 15,361' from DER, 4015' right of centerline, 521' MSL.

WORLAND, WY

WORLAND MUNI

TAKE-OFF MINIMUMS: **Rwys 4, 10, 22, 28**, NA. **Rwy 16**, 300-2 or std. with a min. climb of 230' per NM to 4600.

DEPARTURE PROCEDURE: **All aircraft** climb to 5000, then direct RLY VOR/DME. Aircraft departing RLY R-061 CW R-349 climb on course. All others continue climb in RLY VOR/DME holding pattern (N, right turns, 159° inbound) to cross RLY VOR/DME at or above 7000.

YAKIMA, WA

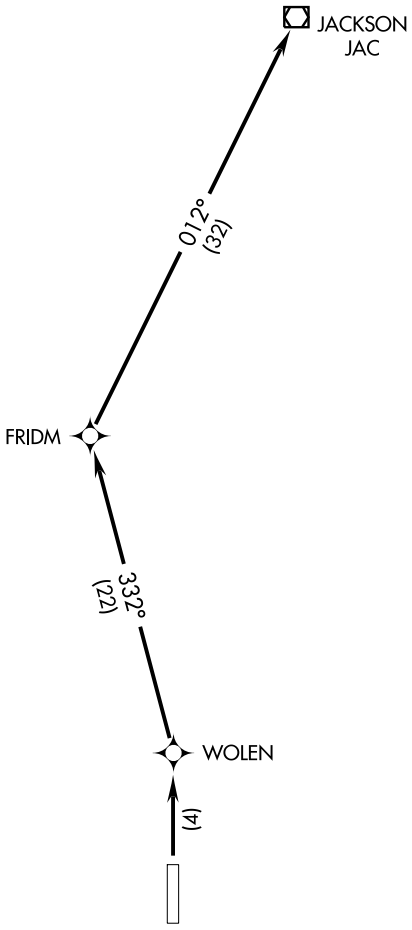
YAKIMA AIR TERMINAL/MCALLISTER FIELD

TAKE-OFF MINIMUMS: **Rwy 4,** NA. **Rwy 9**, 800-4 or std. with a min. climb of 300' per NM to 5000. **Rwys 22,27,** 2500-3 or std. with a min. climb of 300' per NM to 5200.

DEPARTURE PROCEDURE: **Rwy 4,** NA. **Rwys 9,22,27,** Use ZILLA DEPARTURE PROCEDURE.

AFTON TWO DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
128.35 381.6
CASPER RADIO
122.3
CTAF 122.8



NOTE: Chart not to scale.

NOTE: 1. GPS Required.
2. RNAV 1

TAKE-OFF MINIMUMS
Rwy 34: Standard with minimum climb of 330 feet per NM to 10700.
Rwy 16: NA- Obstacles.

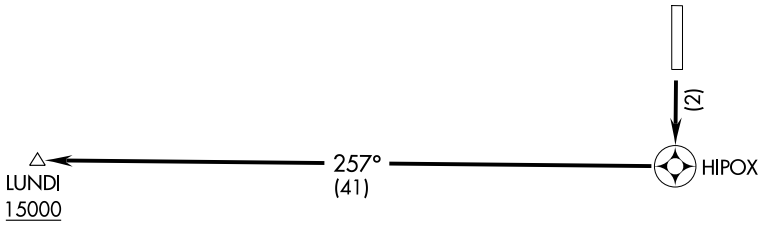
TAKE-OFF OBSTACLE NOTES
Rwy 34: Tree 1054 feet from DER, 605 feet right of centerline, 40' AGL/6241' MSL.
Tree 1703 feet from DER, 235 feet right of centerline, 40' AGL/6259' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 34: Climb to 13000 direct WOLEN, and via 332° track to FRIDM, then via 012° track to JAC VOR/DME.

LUNDI TWO DEPARTURE (RNAV) (OBSTACLE)

SALT LAKE CENTER
128.35 381.6
CASPER RADIO
122.3
CTAF 122.8



TAKE-OFF MINIMUMS
Rwy 16: Standard with minimum climb of 515 feet per NM to 10400.
Rwy 34: NA- obstacles.

TAKE-OFF OBSTACLE NOTES
Rwy 16: Tree 1807 feet from DER, 298 feet right of centerline, 40' AGL/6277' MSL.

NOTE: 1. GPS Required.
2. RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 15000 direct HIPOX and right turn via 257° track to LUNDI.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	7025
156°	TDZE	6188
	Apt Elev	6221

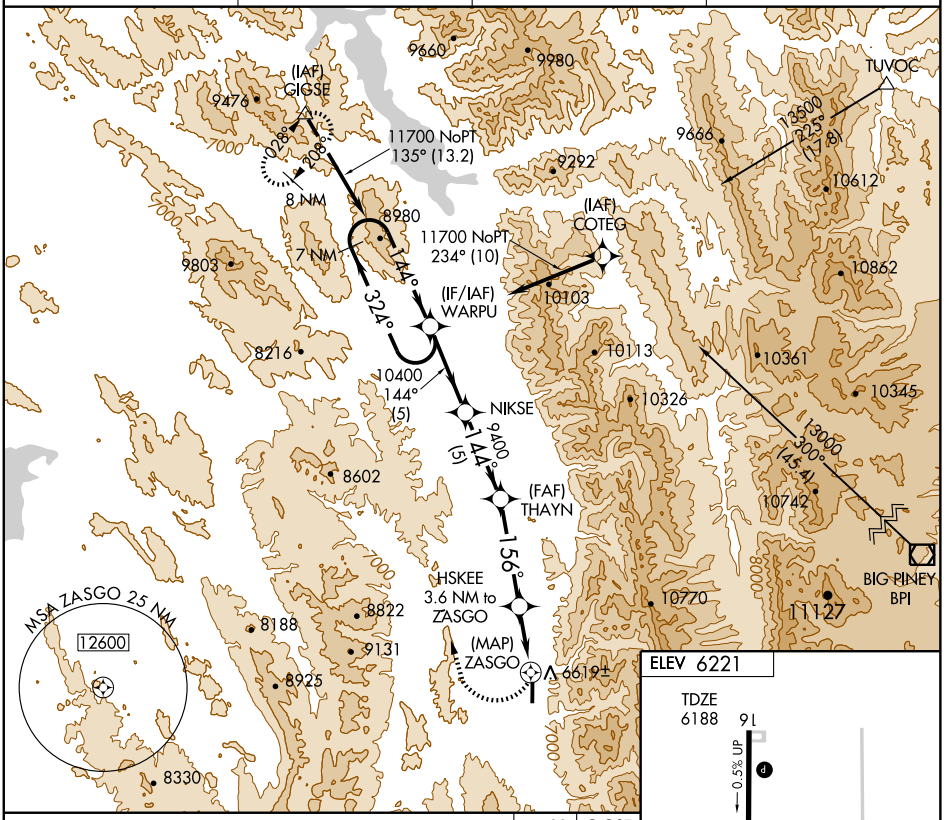
RNAV (GPS) RWY 16

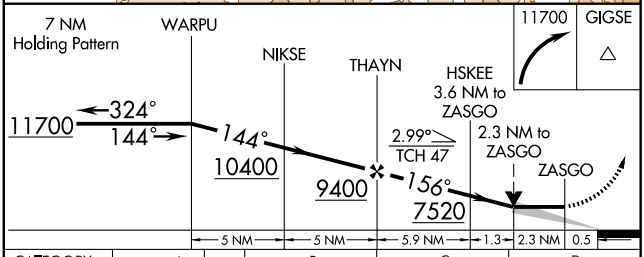
AFTON MUNI (AFO)

DME/DME RNP -0.3 NA.
If local altimeter setting not received, procedure NA.
Circling NA east of Rwy 16-34.

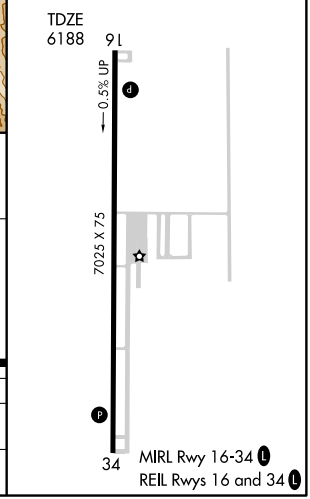
MISSED APPROACH: Climbing right turn to 11700 direct GIGSE and hold. When authorized by ATC, climb-in-hold to 15000.

AWOS-3	SALT LAKE CENTER	CASPER RADIO	UNICOM
119.025	128.35 381.6	122.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	7140-1¼ 952 (1000-1¼)	7140-1½ 952 (1000-1½)	7140-3 952 (1000-3)	NA
CIRCLING	7140-1¼ 919 (1000-1¼)	7140-1½ 919 (1000-1½)	7140-3 919 (1000-3)	NA



NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 34

AFTON MUNI (AFO)

APP CRS	Rwy Idg	7025
346°	TDZE	6221
	Apt Elev	6221

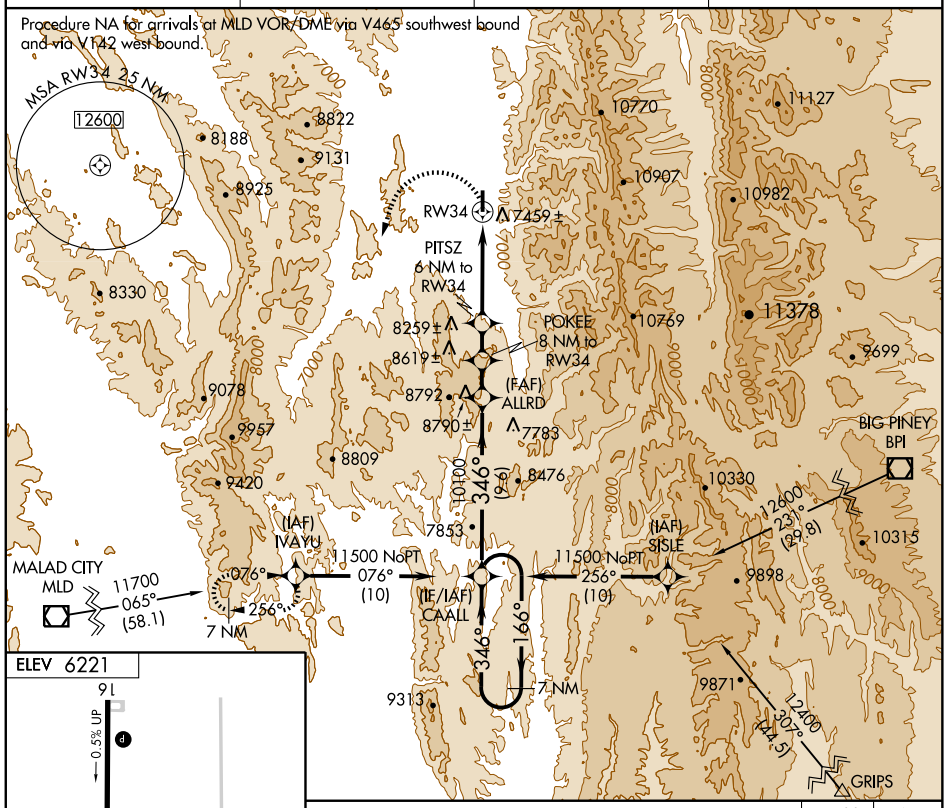
T
NA

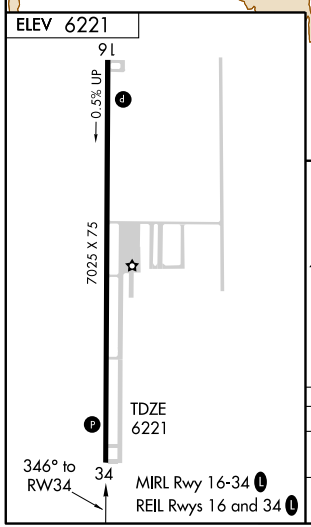
DME/DME RNP- 0.3 NA.
Circling NA east of Rwy 16-34
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.

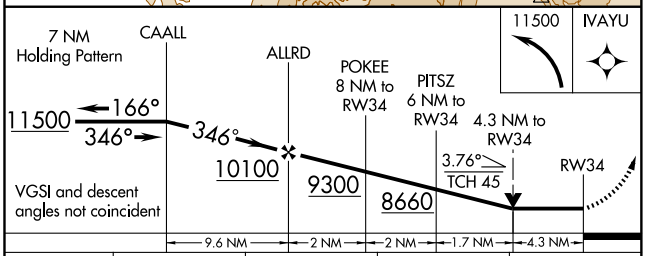
MISSED APPROACH: Climbing left turn to 11500 direct IVAYU and hold.

AWOS-3	SALT LAKE CENTER	CASPER RADIO	UNICOM
119.025	128.35 381.6	122.3	122.8 (CTAF) L

Procedure NA for arrivals at MLD VOR/DME via V465 southwest bound and via V142 west bound.







CATEGORY	A	B	C	D
LNAV MDA	7620-1¼ 1399 (1400-1¼)	7620-1½ 1399 (1400-1½)	7620-3 1399 (1400-3)	NA
CIRCLING	7620-1¼ 1399 (1400-1¼)	7620-1½ 1399 (1400-1½)	7620-3 1399 (1400-3)	NA

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6803
312°	TDZE	6965
	Apt Elev	6990

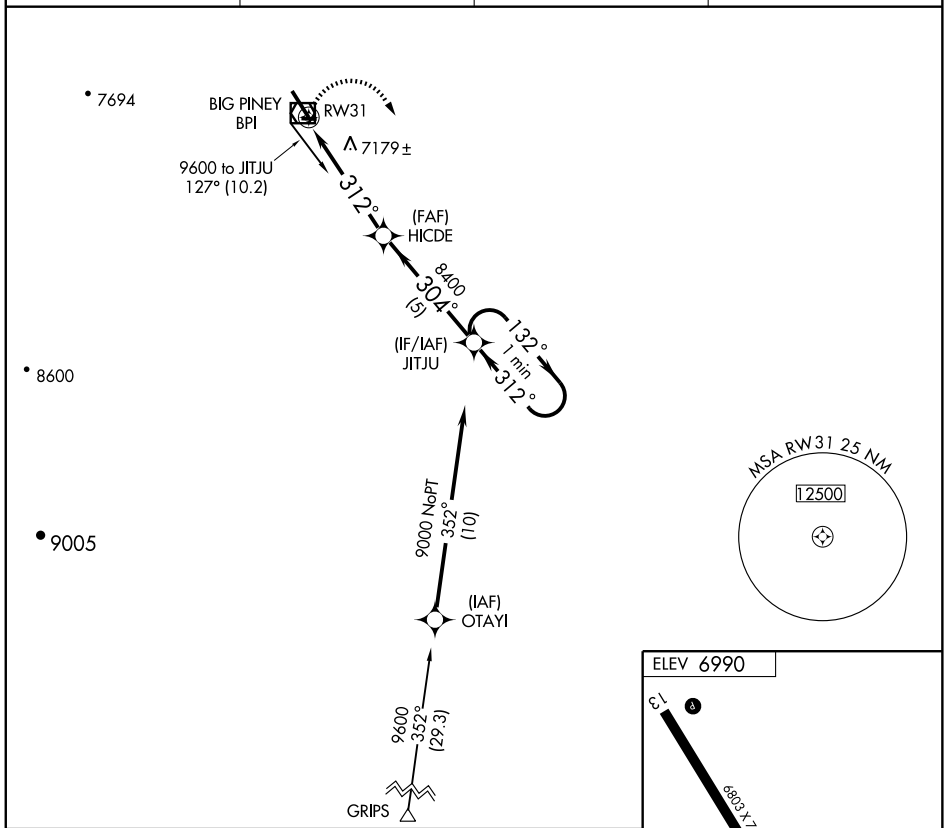
GPS RWY 31

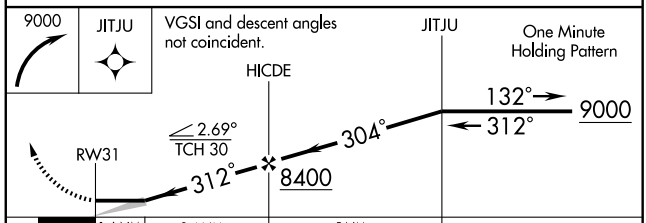
BIG PINEY/ MILEY MEMORIAL FIELD (BPI)

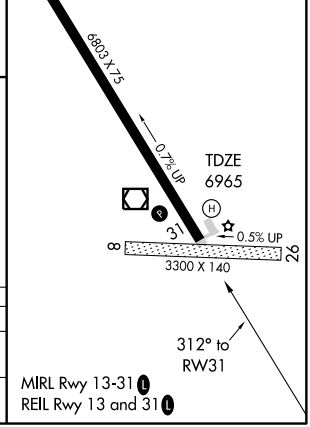
T
NA

MISSED APPROACH: Climbing right turn to 9000 direct JITJU and hold.

ASOS	CASPER RADIO	UNICOM	122.7 L
135.225	122.3	122.8 (CTAF)	







CATEGORY	A	B	C	D
S-31	7440-1 475 (500-1)		7440-1¼ 475 (500-1¼)	7440-1½ 475 (500-1½)
CIRCLING	7460-1 470 (500-1)	7560-1 570 (600-1)	7560-1½ 570 (600-1½)	7560-2 570 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

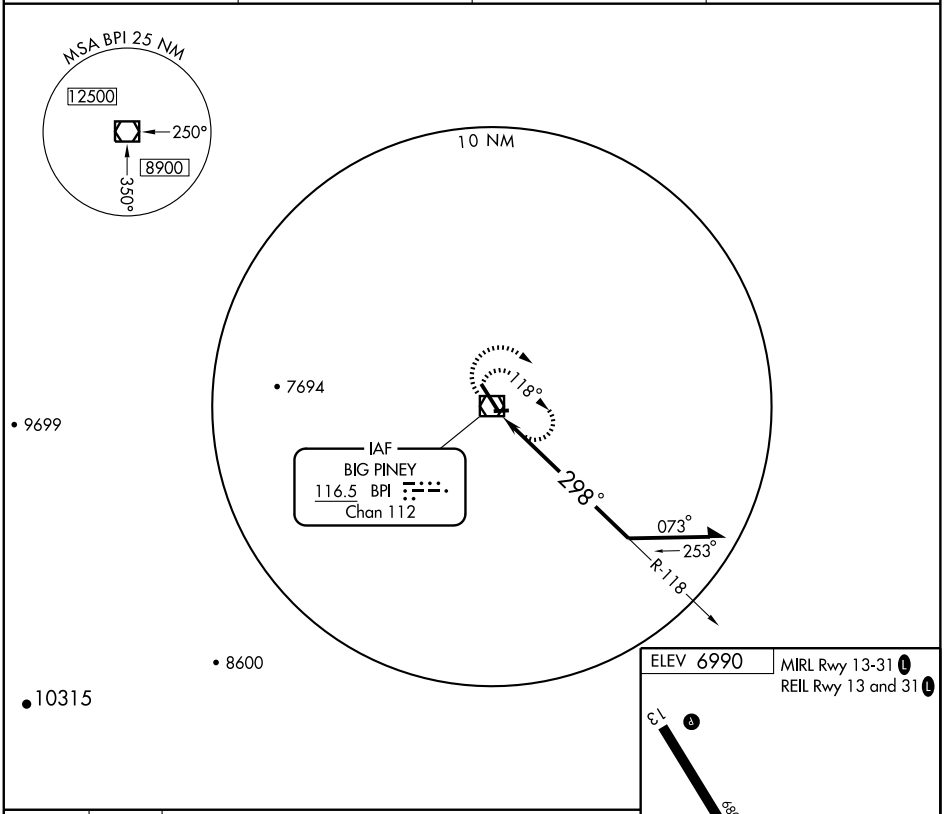
VOR/DME BPI	APP CRS	Rwy Idg	6803
116.5	298°	TDZE	6965
Chan 112		Apt Elev	6990

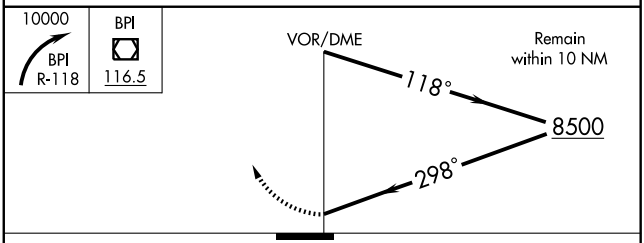
VOR RWY 31

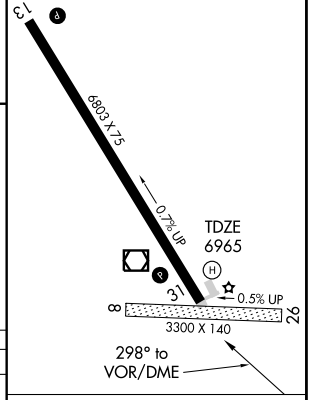
BIG PINEY/ MILEY MEMORIAL FIELD (BPI)

MISSED APPROACH: Climbing right turn to 10000 on BPI R-118, then return to BPI VOR/DME and hold.

ASOS	CASPER RADIO	UNICOM	122.7 L
135.225	122.3	122.8 (CTAF)	







CATEGORY	A	B	C	D
S-31	7680-1	715 (700-1)	7680-2 715 (700-2)	7680-2¼ 715 (700-2¼)
CIRCLING	7680-1	690 (700-1)	7680-2 690 (700-2)	7680-2¼ 690 (700-2¼)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6143
306°	TDZE	4937
	Apt Elev	4968

RNAV (GPS) RWY 31

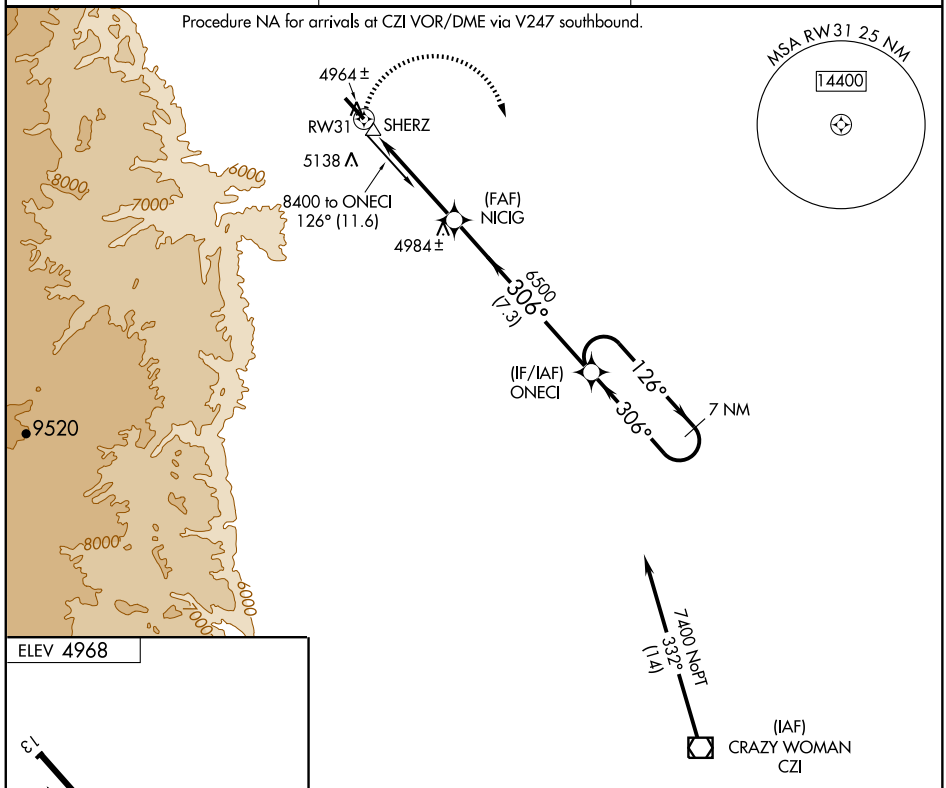
BUFFALO/JOHNSON COUNTY (BYG)

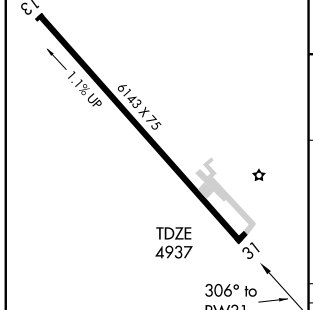
Visibility reduction by helicopters NA.
If local altimeter setting not received, use Sheridan altimeter setting and increase all MDAs 600 feet.
DME/DME RNP- 0.3 NA. Procedure NA at night.

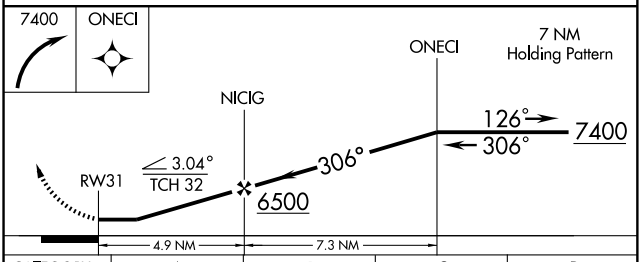
MISSED APPROACH: Climbing right turn to 7400 direct ONECI and hold.

ASOS	CASPER RADIO	UNICOM
135.425	122.025	122.8 (CTAF) L

Procedure NA for arrivals at CZI VOR/DME via V247 southbound.







CATEGORY	A	B	C	D
LNAV MDA	5340-1 403 (400-1)		5340-1¼ 403 (400-1¼)	
CIRCLING	5440-1 472 (500-1)	5520-1 552 (600-1)	5540-1½ 572 (600-1½)	5660-2¼ 692 (700-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME CZI 117.3 Chan 120	APP CRS 319°	Rwy Idg 6143 TDZE 4937 Apt Elev 4968

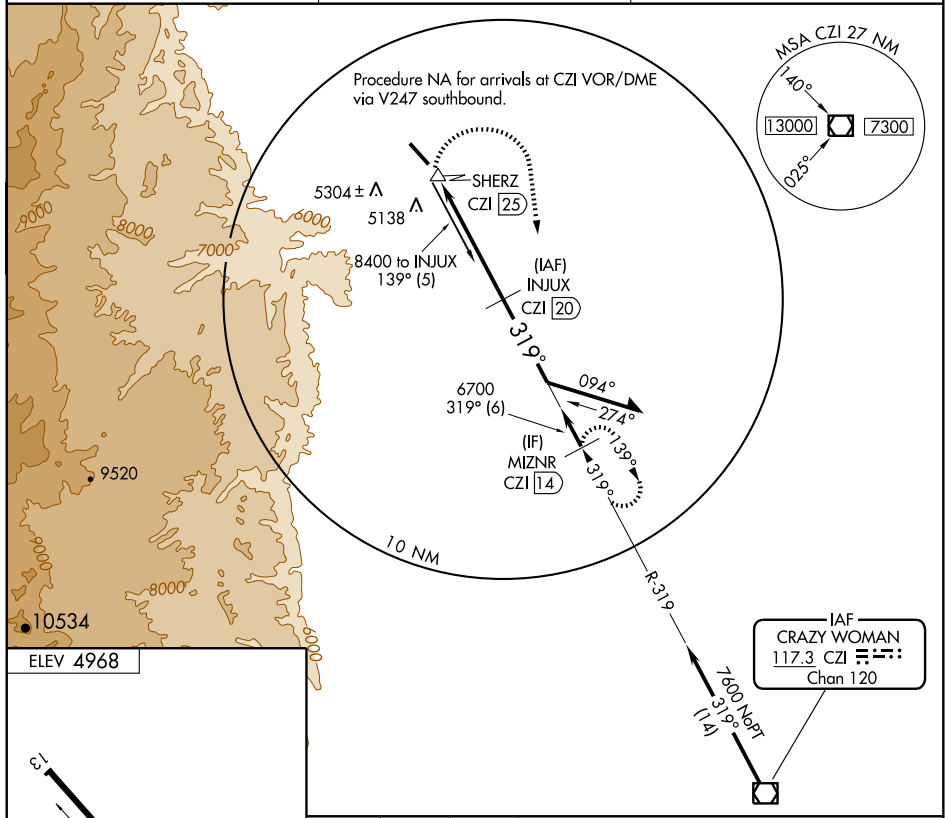
VOR/DME RWY 31

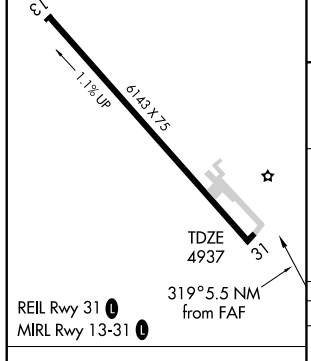
BUFFALO/JOHNSON COUNTY (BYG)

Visibility reduction by helicopters NA.
If local altimeter setting not received, use Sheridan altimeter setting and increase all MDAs 600 feet.
When VGSI inoperative, procedure NA at night.

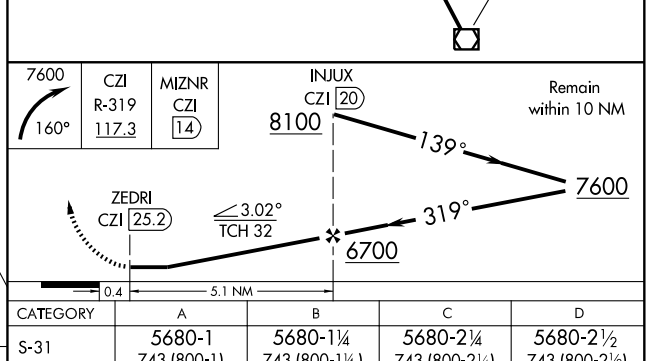
MISSED APPROACH: Climbing right turn to 7600 via heading 160° and CZI VOR/DME R-319 to MIZNR/14 DME and hold.

ASOS	CASPER RADIO	UNICOM
135.425	122.025	122.8 (CTAF) L





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-31	5680-1 743 (800-1)	5680-1¼ 743 (800-1¼)	5680-2¼ 743 (800-2¼)	5680-2½ 743 (800-2½)
CIRCLING	5680-1 712 (800-1)	5680-1¼ 712 (800-1¼)	5680-2¼ 712 (800-2¼)	5680-2½ 712 (800-2½)

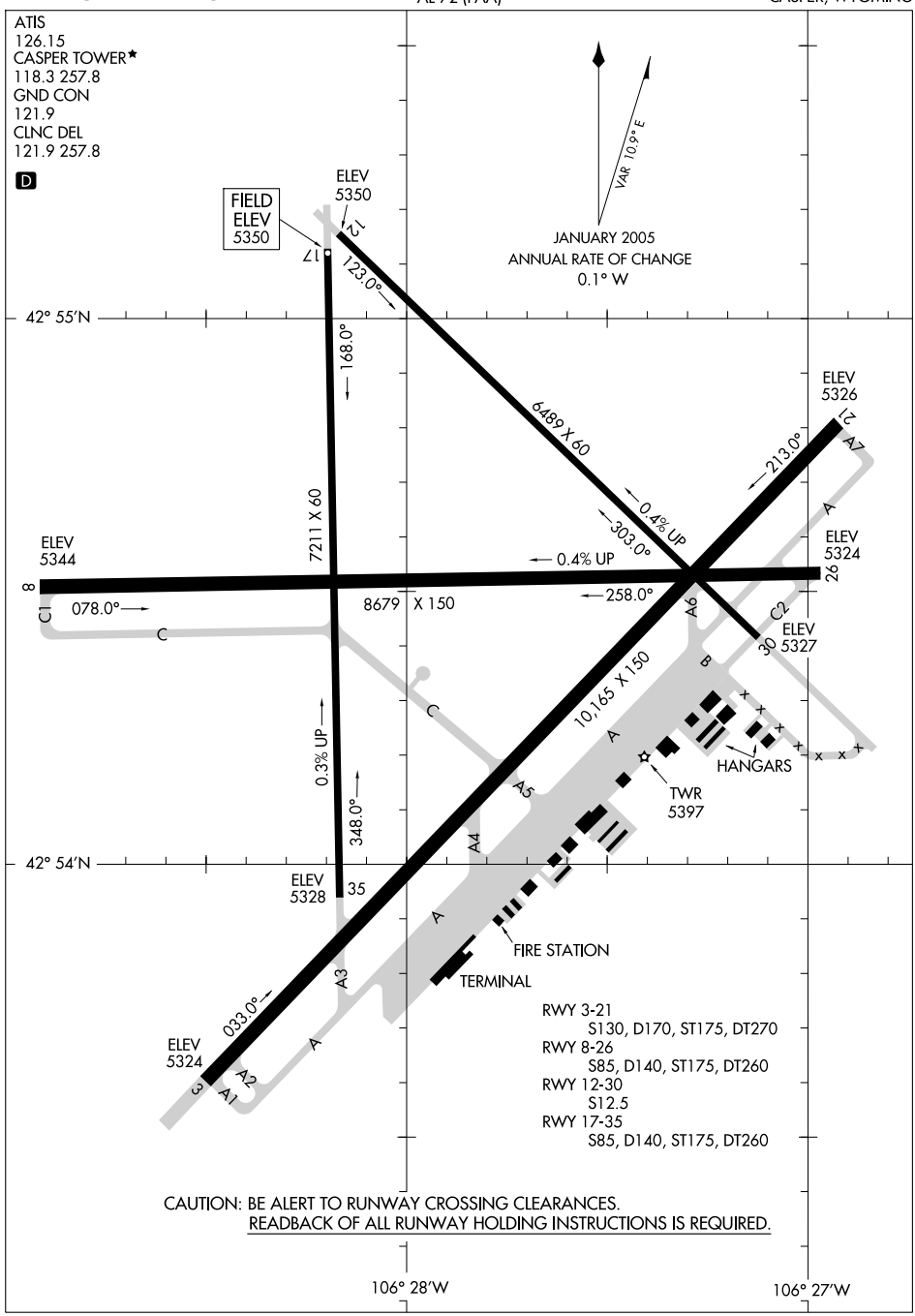
NW-1, 14 JAN 2010 to 11 FEB 2010

09351

AIRPORT DIAGRAM

AL-72 (FAA)

CASPER/NATRONA COUNTY INTL (CPR)
CASPER, WYOMING



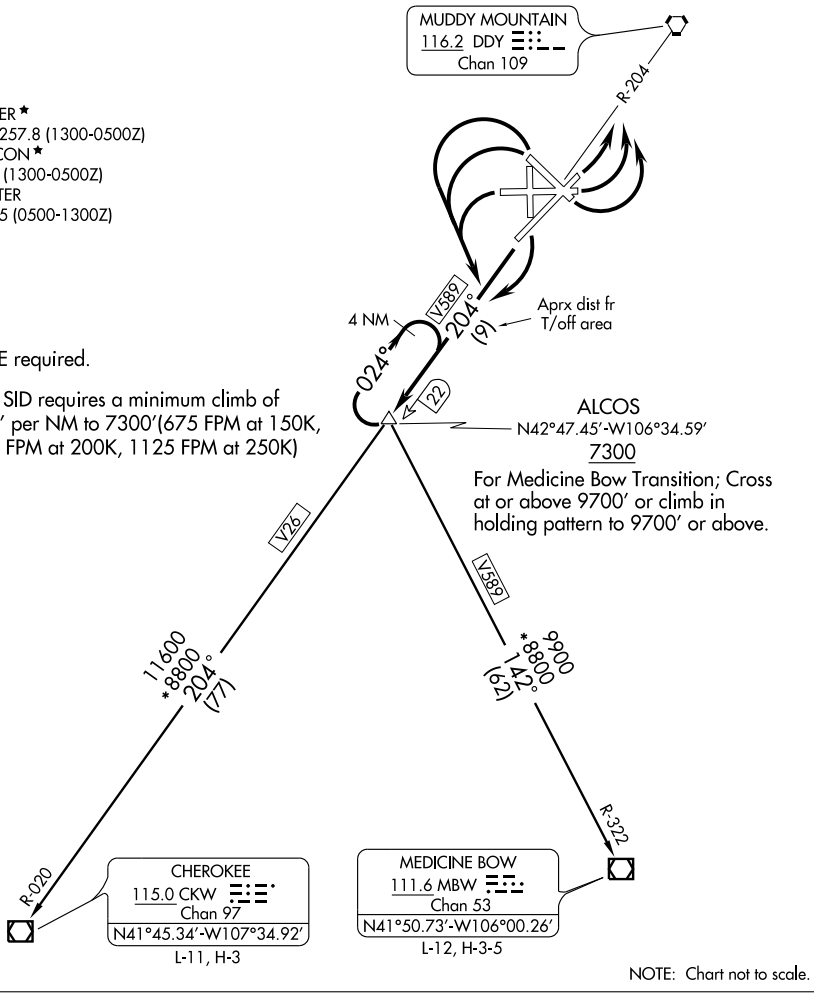
NW-1, 14 JAN 2010 to 11 FEB 2010

ALCOS THREE DEPARTURE

SL-72 (FAA)

CASPER/NATRONA COUNTY INTL (CPR)
CASPER, WYOMING

ATIS 126.15
CLNC DEL
121.9 257.8
GND CON
121.9 257.8
CASPER TOWER ★
118.3 (CTAF) 257.8 (1300-0500Z)
CASPER DEP CON ★
120.65 354.1 (1300-0500Z)
DENVER CENTER
135.6 363.025 (0500-1300Z)



NOTE: DME required.

NOTE: This SID requires a minimum climb of 270' per NM to 7300'(675 FPM at 150K, 900 FPM at 200K, 1125 FPM at 250K)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Turn right, thence. . . .

ALL OTHER RUNWAYS: Turn left, thence. . . .

. . . .climb via DDY R-204 to cross ALCOS INT at or above 7300', then via (transition) or (assigned route).

CHEROKEE TRANSITION (ALCOS3.CKW): Via DDY R-204 and V26 to CKW VOR/DME.

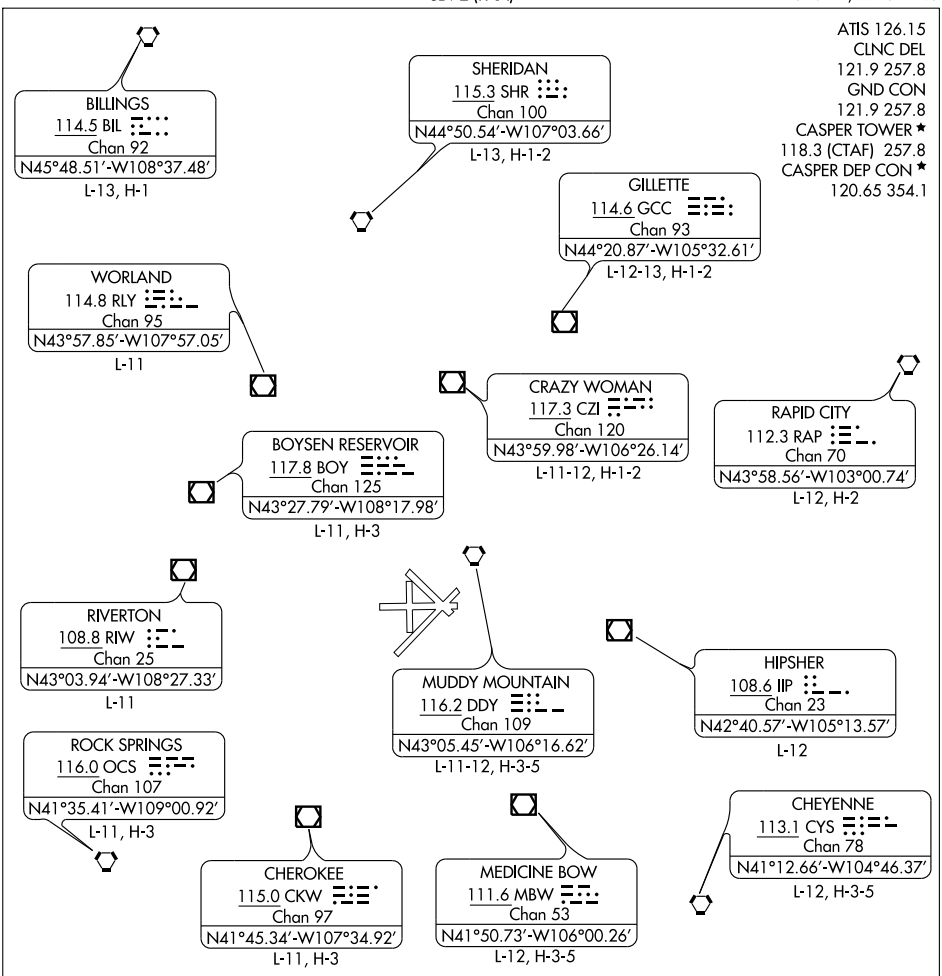
MEDICINE BOW TRANSITION (ALCOS3.MBW): Via MBW R-322 to MBW VOR/DME. Cross ALCOS INT at or above 9700' or climb in holding pattern to 9700' or above.

NW-1, 14 JAN 2010 to 11 FEB 2010

CASPER ONE DEPARTURE

SL-72 (FAA)

CASPER/NATRONA COUNTY INTL (CPR)
CASPER, WYOMING



NOTE: Aircraft departing Runways 12 and 17 will be issued departure instructions by clearance delivery/ground control.

NOTE: Chart not to scale.

NW-1, 14 JAN 2010 to 11 FEB 2010

DEPARTURE ROUTE DESCRIPTION

All aircraft fly runway heading for radar vectors to filed/assigned fix/route. Maintain 14,000 feet or assigned lower altitude. Expect further clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for one minute after departure, maintain runway heading until 7,000 feet, then climb to filed altitude via direct DDY VORTAC, then via assigned fix/route. Runways 3 and 8 turn left to DDY VORTAC, all others turn right to DDY VORTAC.

LOC I-SYD	APP CRS	Rwy Idg	10165
111.3	032°	TDZE	5328
		Apt Elev	5350

ILS or LOC RWY 3

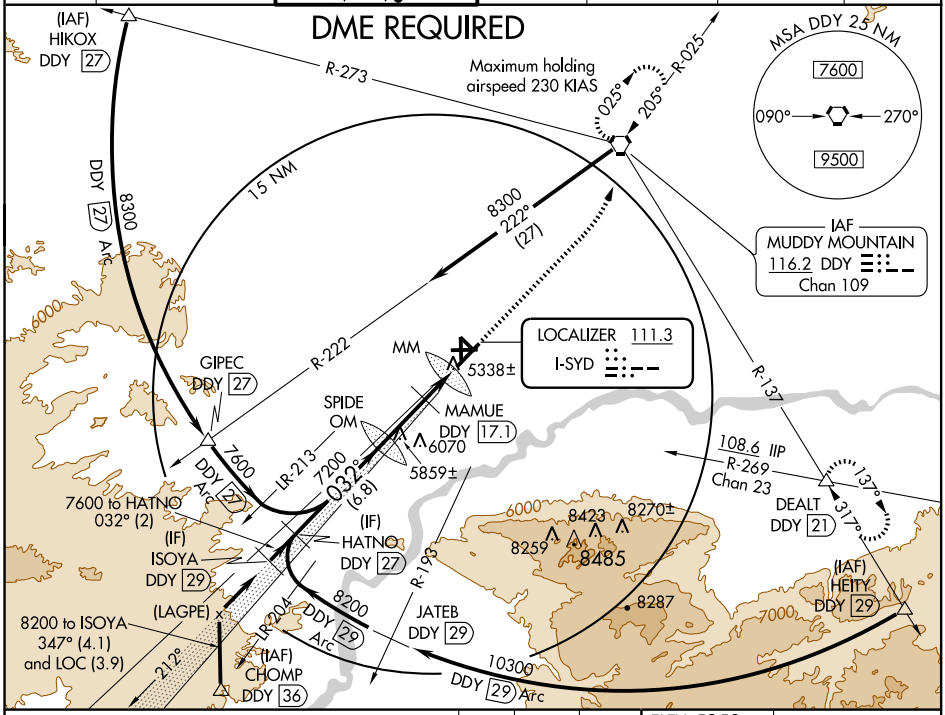
CASPER/NATRONA COUNTY INTL (CPR)

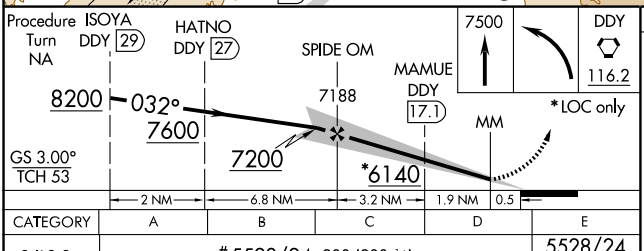
For inoperative MALSR, increase S-ILS-3 Cat E visibility to RVR 4000, S-LOC-3 Cat E visibility to 3. MAMUE FIX MINIMUMS: For inoperative MALSR, increase S-LOC-3 Cats D and E visibility to 1. DME from DDY VORTAC, simultaneous reception of I-SYD and DDY DME required. # RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

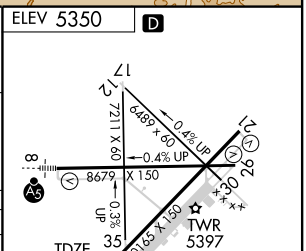
MISSED APPROACH: Climb to 7500 then left turn direct DDY VORTAC and hold. (TACAN aircraft continue climb to 12000 via DDY VORTAC R-137 to DEALT/DDY 21 DME and hold SE, right turn, 317° inbound).

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95





CATEGORY	A	B	C	D	E
S-ILS 3	#5528/24 200 (200-½)				5528/24 200 (200-½)
S-LOC 3	6140/24 812 (800-½)	6140/40 812 (800-¾)	6140-2 812 (800-2)	6140-2¼ 812 (800-2¼)	6140-2½ 812 (800-2½)
CIRCLING	6140-1 790 (800-1)	6140-1¼ 790 (800-1¼)	6140-2½ 790 (800-2½)	6140-2¾ 790 (800-2¾)	6220-3 870 (900-3)
MAMUE FIX MINIMUMS					
S-LOC 3	5600/24 272 (300-½)			5600/40 272 (300-¾)	
CIRCLING	5780-1 430 (500-1)	5800-1 450 (500-1)	5800-1½ 450 (500-1½)	5900-2 550 (600-2)	6220-3 870 (900-3)



FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-CPR	APP CRS	Rwy Idg	8679
110.3	077°	TDZE	5344
		Apt Elev	5350

ILS or LOC RWY 8

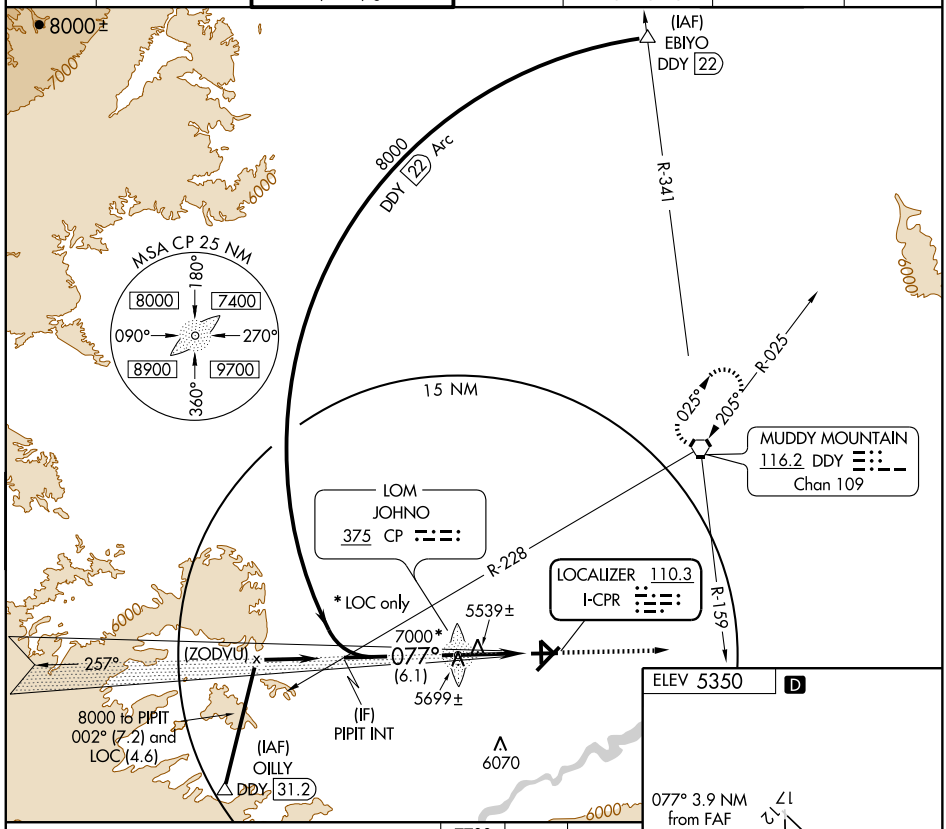
CASPER/NATRONA COUNTY INTL (CPR)

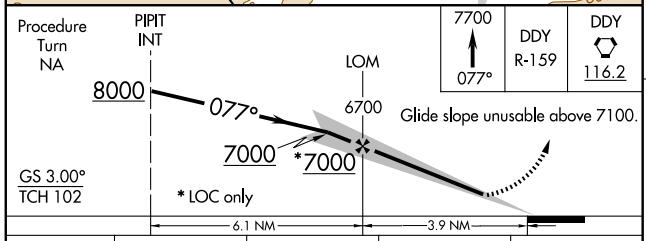
T Inoperative table does not apply to S-ILS 8.

MALSR

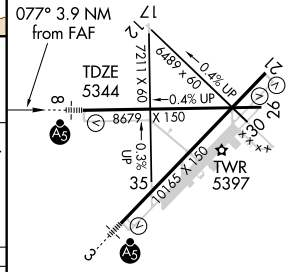
MISSED APPROACH: Climb to 7700 via heading 077° and DDY VORTAC R-159 to DDY VORTAC and hold.

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95





7700	DDY	DDY
077°	R-159	116.2



CATEGORY	A	B	C	D
S-ILS 8	5644/40	300 (300-¾)		NA
S-LOC 8	5800/24	456 (500-½)	5800/40 456 (500-¾)	NA
CIRCLING	5800-1	450 (500-1)	5800-1½ 450 (500-1½)	NA

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 73006 W03A	APP CRS 032°	Rwy Idg 10165 TDZE 5328 Apt Elev 5350

RNAV (GPS) RWY 3

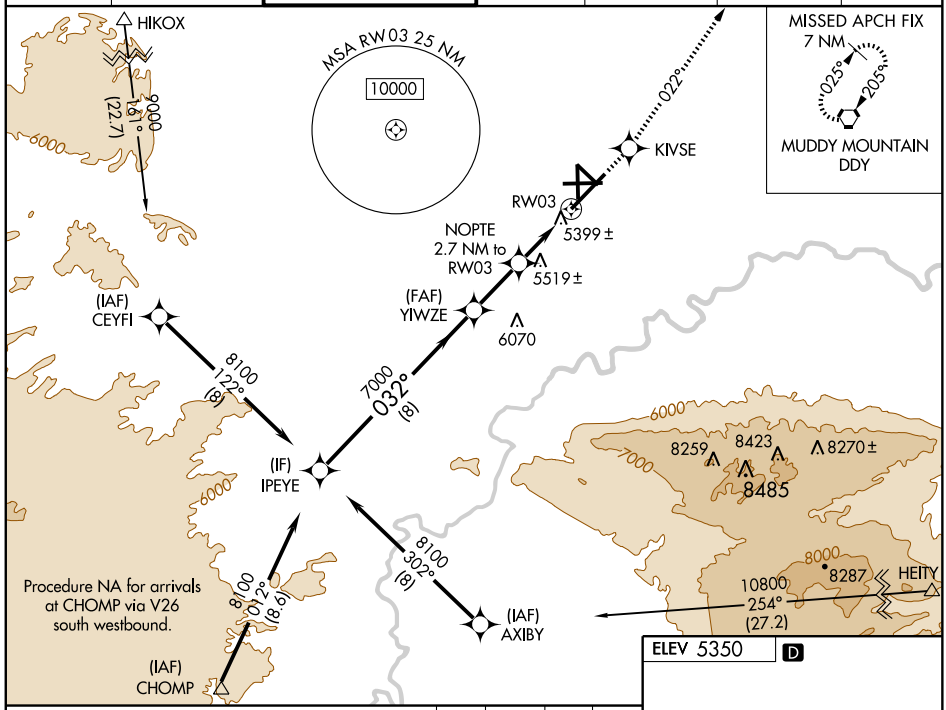
CASPER/NATRONA COUNTY INTL (CPR)

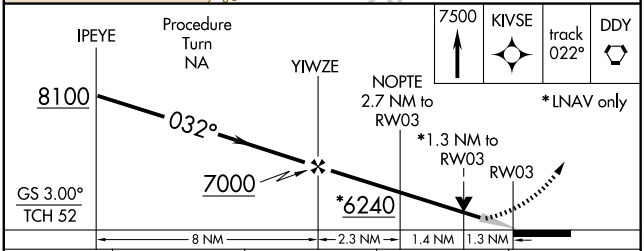
For inoperative MALSR, increase LPV all Cats visibility to 1 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

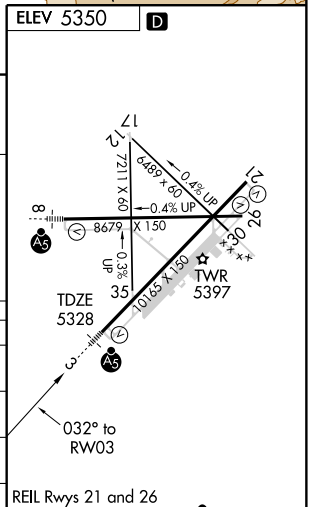
MISSED APPROACH: Climb to 7500 direct KIVSE and via track 022° to DDY VORTAC and hold.

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95





CATEGORY	A	B	C	D
LPV DA	5643/24 315 (300-½)			
LNAV/VNAV DA	5691/40 363 (400-¾)			
LNAV MDA	5780/24 452 (500-½)		5780/40 452 (500-¾)	5780/50 452 (500-1)
CIRCLING	5780-1 430 (500-1)	5800-1 450 (500-1)	5800-1½ 450 (500-1½)	5900-2 550 (600-2)



NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86306 W08A	APP CRS 077°	Rwy Idg 8679 TDZE 5344 Apt Elev 5350

RNAV (GPS) RWY 8

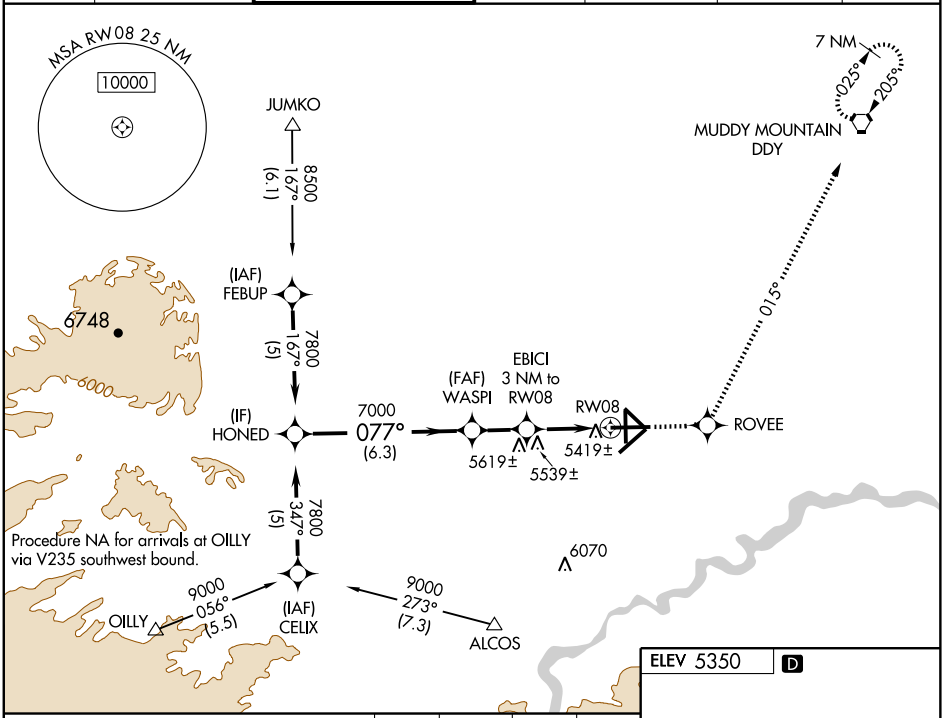
CASPER/NATRONA COUNTY INTL (CPR)

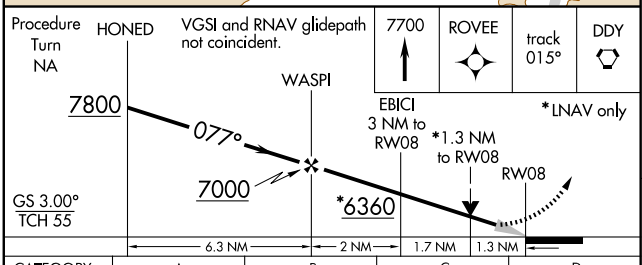
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

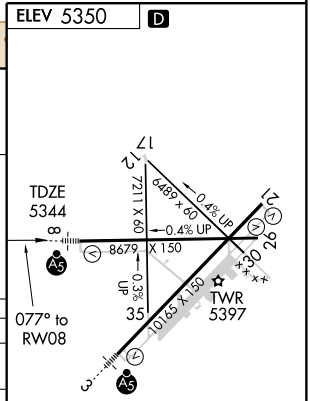
MISSED APPROACH: Climb to 7700 direct ROVEE and via track 015° to DDY VORTAC and hold.

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95





CATEGORY	A	B	C	D
LPV DA	5594/24 250 (300-½)			
LNAV/VNAV DA	5689/40 345 (400-¾)			
LNAV MDA	5800/24 456 (500-½)		5800/40 456 (500-¾)	5800/50 456 (500-1)
CIRCLING	5800-1 450 (500-1)		5800-1½ 450 (500-1½)	5900-2 550 (600-2)



REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	10165
CH 63012	212°	TDZE	5330
W21A		Apt Elev	5350

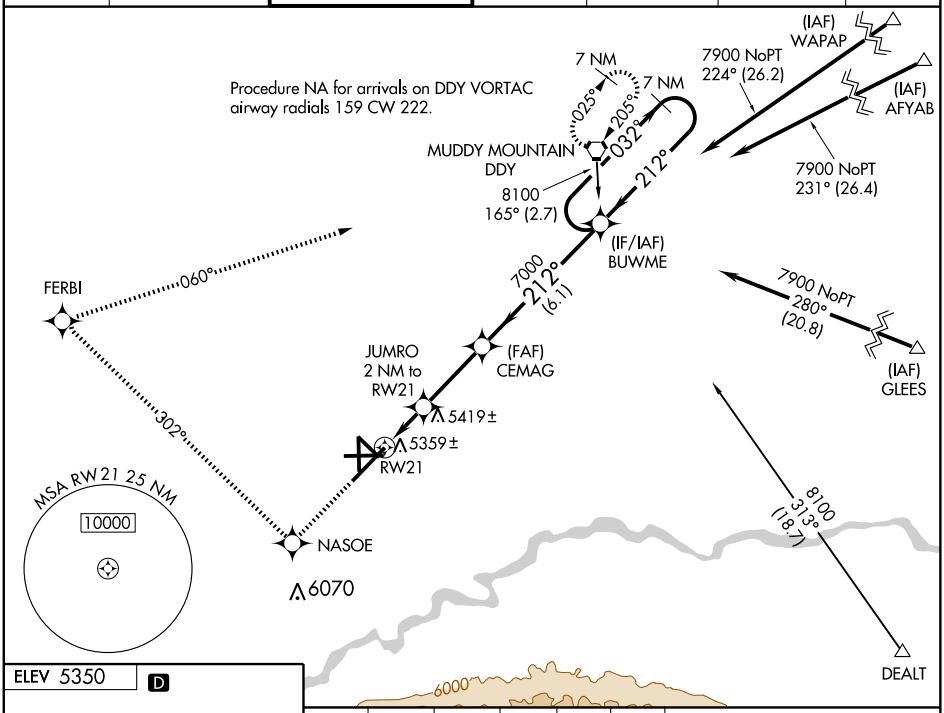
RNAV (GPS) RWY 21

CASPER/NATRONA COUNTY INTL (CPR)

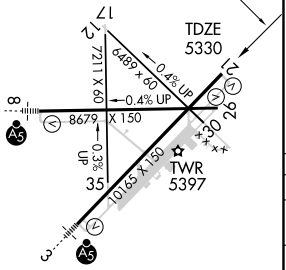
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 8100 direct NASOE and right turn via track 302° to FERBI and via track 060° to DDY VORTAC and hold.

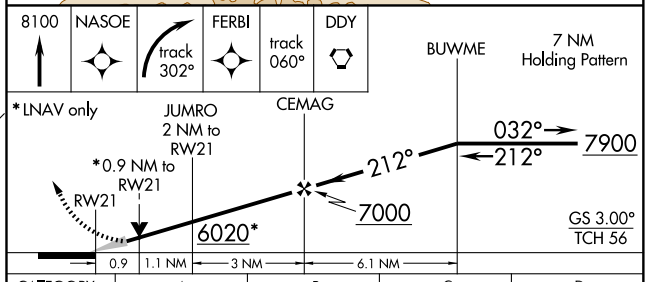
ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95



ELEV 5350 D



REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L



CATEGORY	A	B	C	D
LPV DA	5580-¾ 250 (300-¾)			
LNAV/VNAV DA	5629-1 299 (300-1)			
LNAV MDA	5680-1 350 (400-1)			5680-1¼ 350 (400-1¼)
CIRCLING	5780-1 430 (500-1)	5800-1 450 (500-1)	5800-1½ 450 (500-1½)	5900-2 550 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 78112 W26A	APP CRS 257°	Rwy Idg 8679 TDZE 5335 Apt Elev 5350

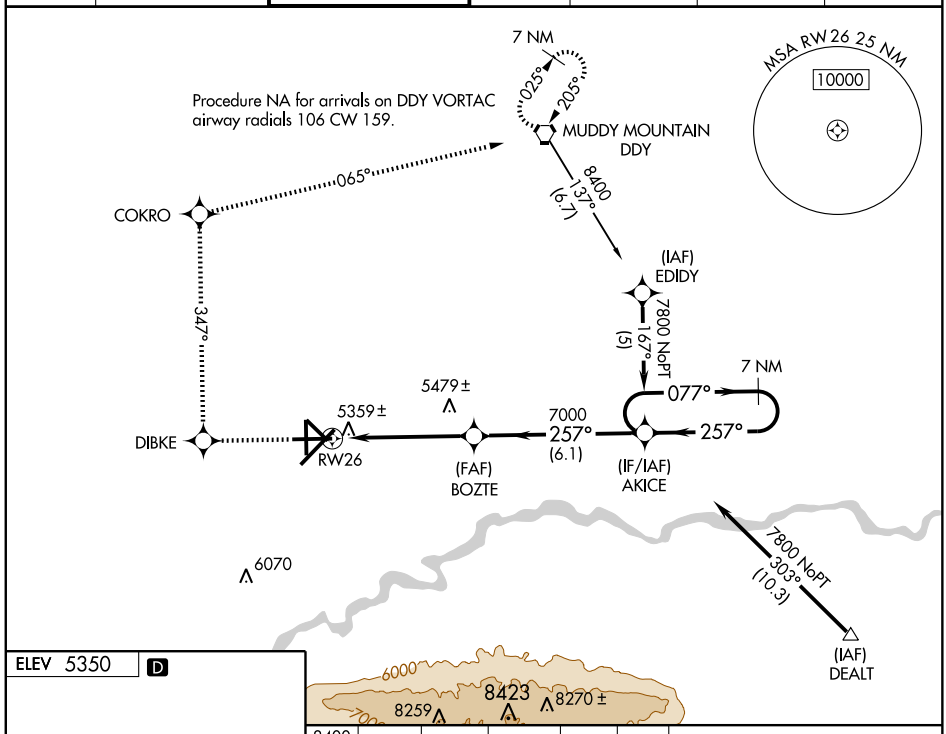
RNAV (GPS) RWY 26

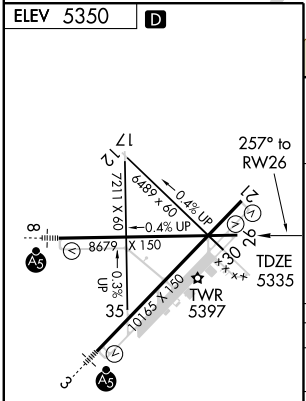
CASPER/NATRONA COUNTY INTL (CPR)

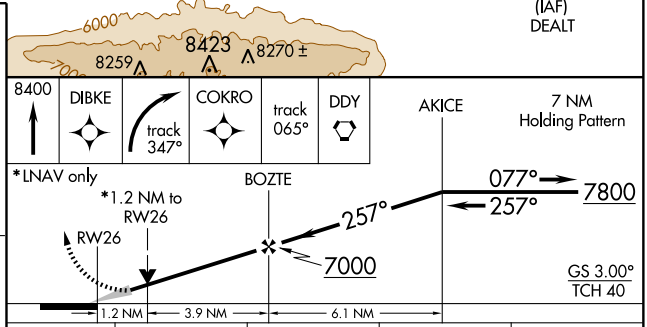
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 8400 direct DIBKE and right turn via track 347° to COKRO and via track 065° to DDY VORTAC and hold.

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) Ⓛ 257.8	121.9	121.9 257.8	122.4	122.95







CATEGORY	A	B	C	D
LPV DA	5585-1 250 (300-1)			
LNAV/VNAV DA	5629-1 294 (300-1)			
LNAV MDA	5740-1 405 (400-1)		5740-1¼ 405 (400-1¼)	
CIRCLING	5780-1 430 (500-1)	5800-1 450 (500-1)	5800-1½ 450 (500-1½)	5900-2 550 (600-2)

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 Ⓛ

NW-1, 14 JAN 2010 to 11 FEB 2010

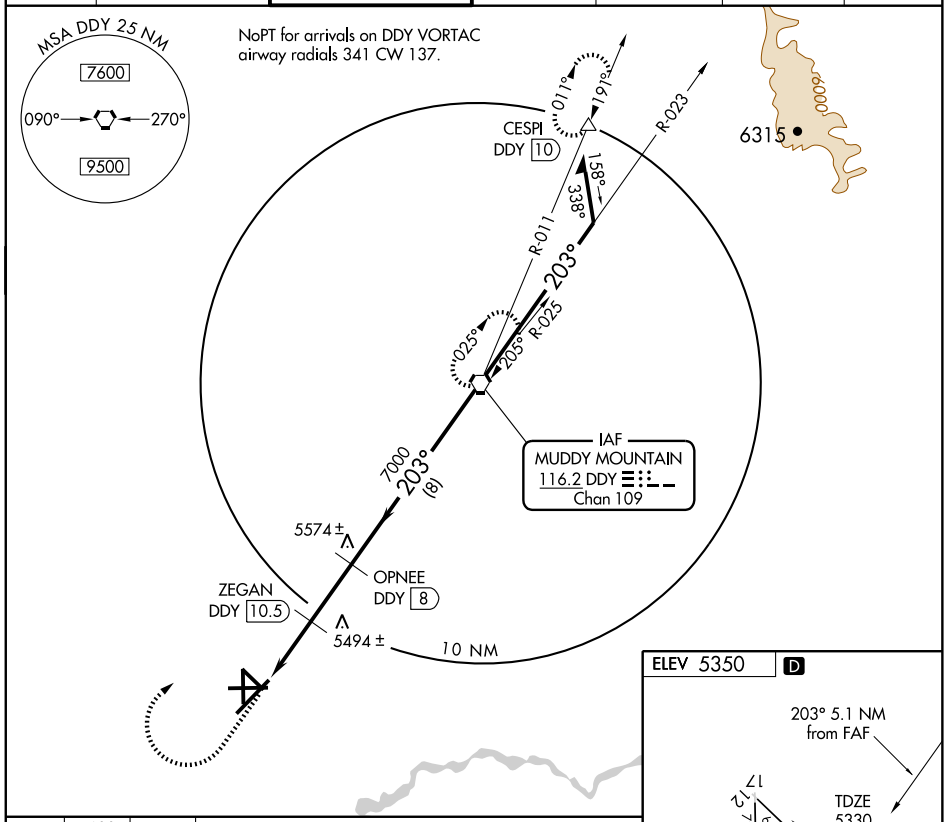
VORTAC DDY	APP CRS	Rwy Idg	10165
116.2	203°	TDZE	5330
Chan 109		Apt Elev	5350

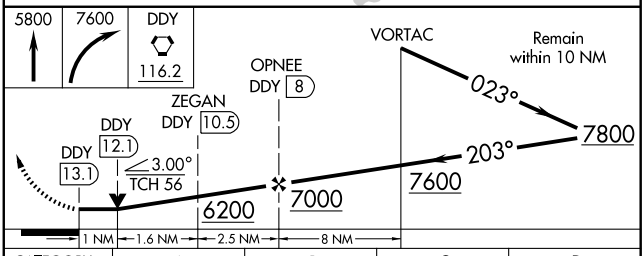
VOR/DME or TACAN RWY 21

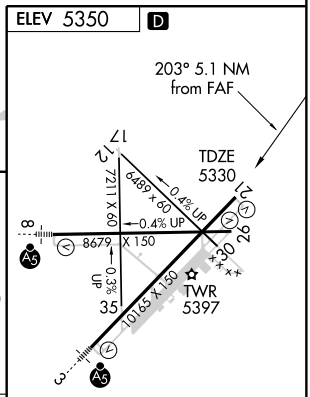
CASPER/NATRONA COUNTY INTL (CPR)

MISSED APPROACH: Climb to 5800, then climbing right turn to 7600 direct DDY VORTAC and hold (TACAN aircraft continue climb to 8000 via DDY VORTAC R-011 to CESPI/10 DME and Hold N, RT, 191° inbound).

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) L 257.8	121.9	121.9 257.8	122.4	122.95







CATEGORY	A	B	C	D
S-21	5680-1 350 (400-1)			5680-1¼ 350 (400-1¼)
CIRCLING	5780-1 430 (500-1)	5800-1 450 (500-1)	5800-1½ 450 (500-1½)	5900-2 550 (600-2)

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC DDY	APP CRS	Rwy Idg	10165
116.2	025°	TDZE	5328
Chan 109		Apt Elev	5350

VOR/DME RWY 3

CASPER/NATRONA COUNTY INTL (CPR)

MALSR

MISSED APPROACH: Climb to 7600 direct DDY VORTAC and hold.

ATIS	CASPER APP CON ★	CASPER TOWER ★	GND CON	CLNC DEL	CASPER RADIO	UNICOM
126.15	120.65 354.1	118.3 (CTAF) 257.8	121.9	121.9 257.8	122.4	122.95

Procedure NA for arrivals at DDY VORTAC via airway radials 204 CW 273.

(IAF) RICOK DDY 29

R-273

R-025

025° 205°

IAF MUDDY MOUNTAIN 116.2 DDY Chan 109

8400 to JEKUV

DDY 29 Arc

8400 222° (29)

MSA DDY 25 NM

7600

090° 270°

9500

R-222

R-137

R-186

(IAF) JEKUV DDY 29

HUSAS DDY 17.8

CEGPI DDY 21.1

5734±

6070

7400 025° (7.9)

DDY 29 8400 Arc

8423 8270±

8259 8485

FASUT DDY 29

NUNTE DDY 29

8400 DDY 29 Arc

8287

(IAF) HEITY DDY 29

8400 to FASUT 010° (0.8) and 024° (6.2)

(IAF) CHOMP DDY 36

10300 to NUNTE

DDY 29 Arc

15 NM

R-203

ELEV 5350 D

17

21

26

30

6489 X 60

0.4% UP

7211 X 60

0.4% UP

8679 X 150

0.3% UP

10165 X 150

TWR 5397

TDZE 5328

35

025° 6.4 NM from FAF

FASUT DDY 29

CEGPI DDY 21.1

HUSAS DDY 17.8

DDY 16.1

DDY 14.7

8400

025°

3.00° TCH 53

7400

6360

Procedure Turn NA

7.9 NM 3.3 NM 1.7 NM 1.4 NM

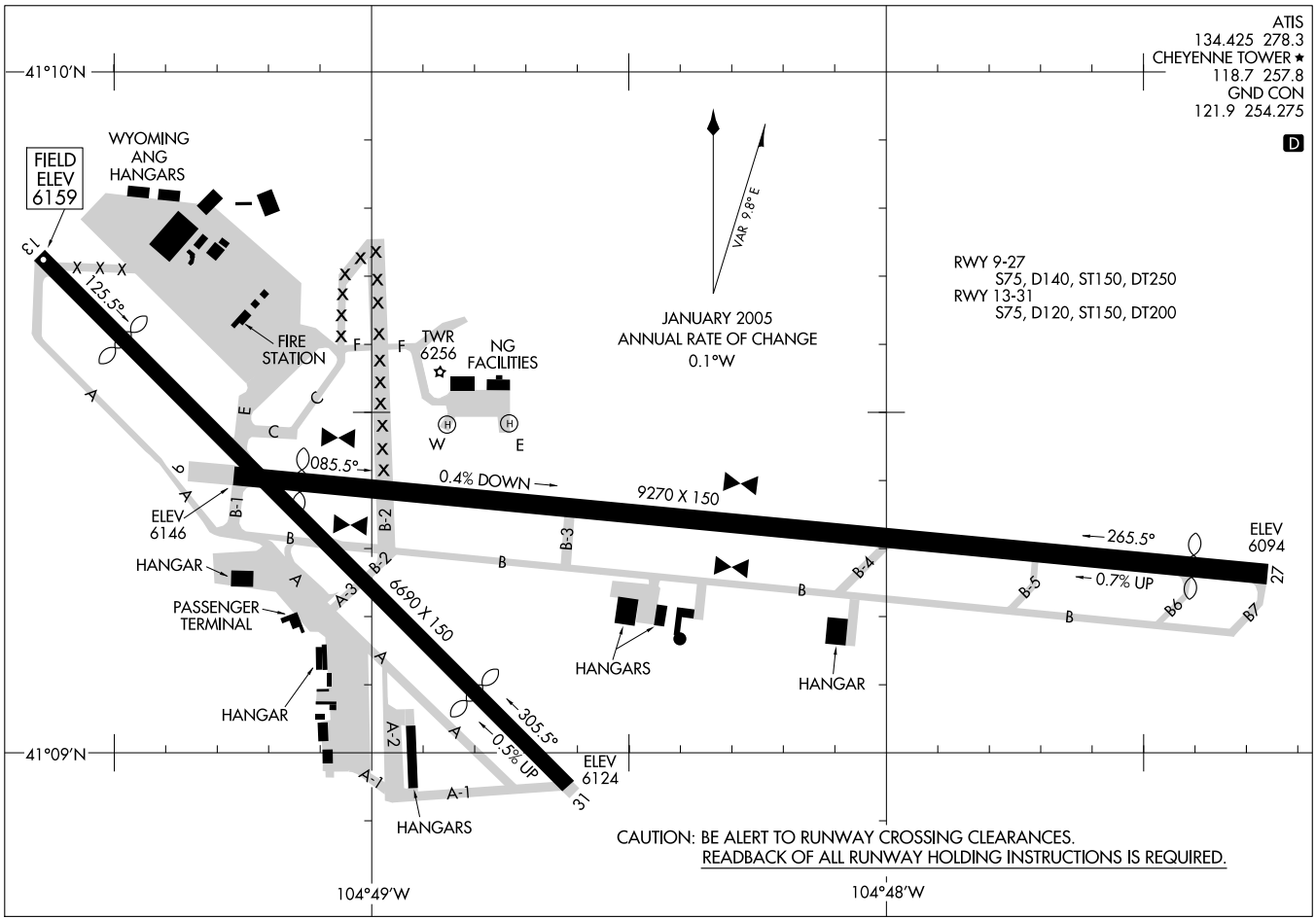
7600

DDY 116.2

CATEGORY	A	B	C	D
S-3	5820/24	492 (500-½)	5820/40 492 (500-¾)	5820/50 492 (500-1)
CIRCLING	5820-1	470 (500-1)	5820-1½ 470 (500-1½)	5900-2 550 (600-2)

REIL Rwy 21 and 26
HIRL Rwy 3-21 and 8-26 L

NW-1, 14 JAN 2010 to 11 FEB 2010


ATIS
134.425 278.3
CHEYENNE TOWER ★
118.7 257.8
GND CON
121.9 254.275
D
AIRPORT DIAGRAM
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)
CHEYENNE, WYOMING
AL-80 (FAA)
41°10′N
41°09′N
104°49′W
104°48′W
FIELD ELEV 6159
WYOMING ANG HANGARS
FIRE STATION
TWR 6256
NG FACILITIES
W
E
VAR 9.8° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 9-27
S75, D140, ST150, DT250
RWY 13-31
S75, D120, ST150, DT200
125.5°
085.5°
0.4% DOWN
9270 X 150
265.5°
0.7% UP
ELEV 6094
ELEV 6146
HANGAR
PASSENGER TERMINAL
6690 X 150
305.5°
0.5% UP
ELEV 6124
HANGARS
HANGAR
HANGARS
HANGAR
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

LOC I-CYS	APP CRS	Rwy Idg	7985
110.1	265°	TDZE	6121
		Apt Elev	6160

ILS or LOC RWY 27

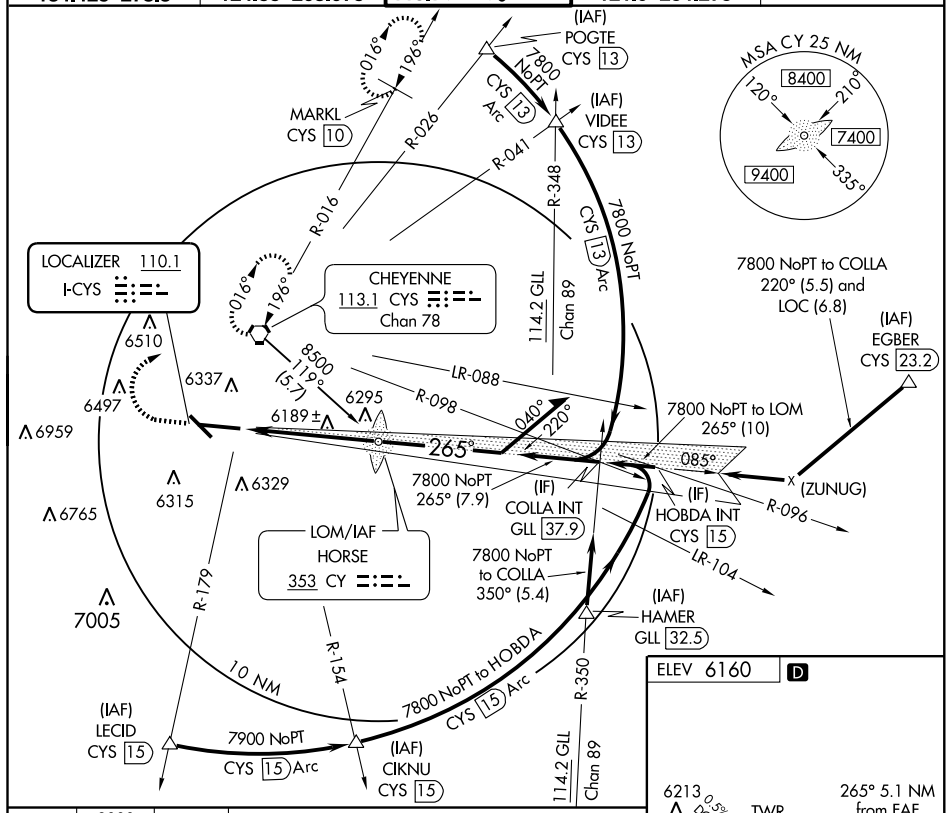
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

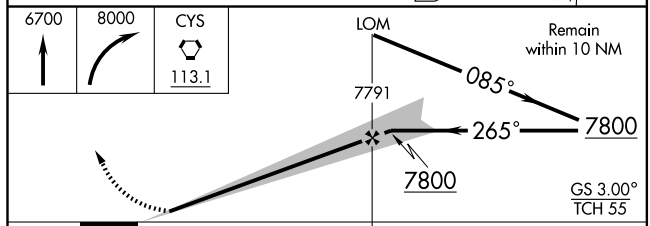
ASR/PAR — For inoperative MALSR, increase S-LOC 27 Cat D visibility to RVR 5000.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.

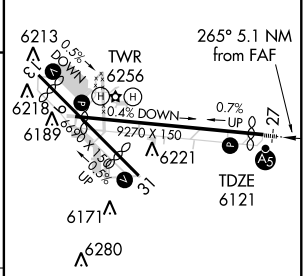
MALSR

MISSED APPROACH: Climb to 6700, then climbing right turn to 8000 direct CYS VORTAC and hold. (TACAN aircraft continue via CYS R-016 to MARKL/10 DME and hold N, RT, 196° inbound.)

ATIS	CHEYENNE APP CON	CHEYENNE TOWER *	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95







CATEGORY	A	B	C	D
S-ILS 27		* 6321/24 200 (200-½)		
S-LOC 27		6440/24 319 (300-½)		6440/40 319 (300-¾)
CIRCLING	6660-1 500 (500-1)		6660-1½ 500 (500-1½)	6720-2 560 (600-2)

REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NW-1, 14 JAN 2010 to 11 FEB 2010

LOM CY	APP CRS	Rwy Idg	7985
353	265°	TDZE	6121
		Apt Elev	6156

NDB RWY 27

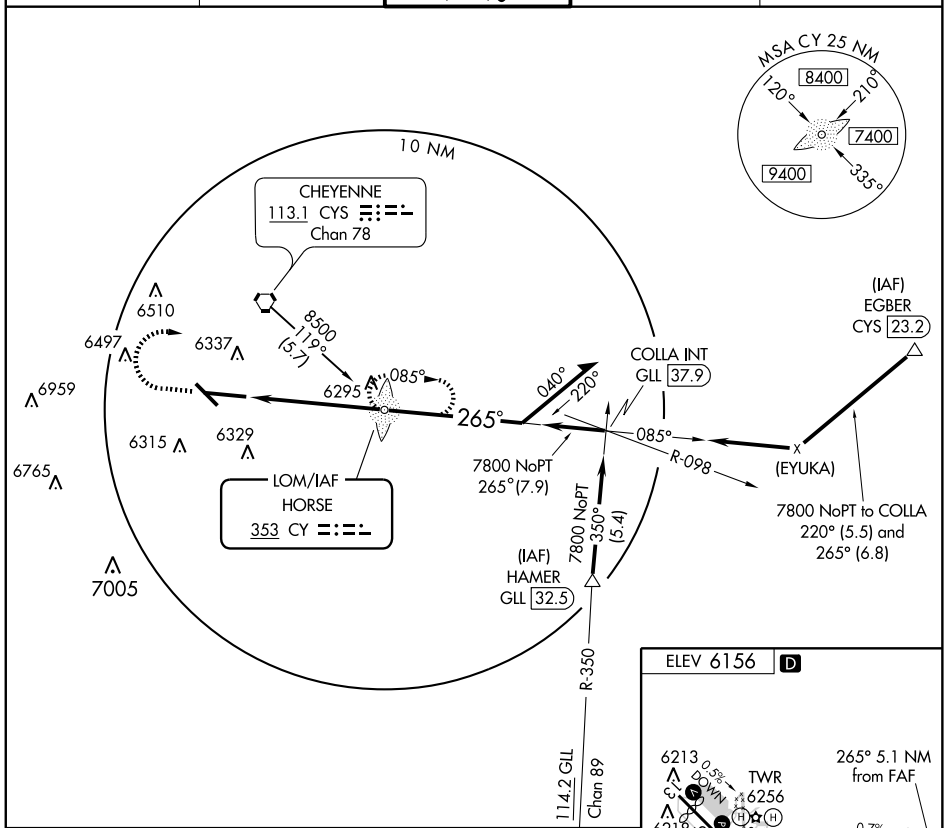
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

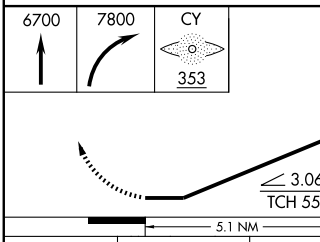
ASR/PAR

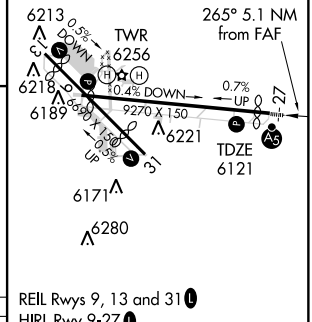
MALSR

MISSED APPROACH: Climb to 6700, then climbing right turn to 7800 direct HORSE LOM and hold.

ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95







REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

CATEGORY	A	B	C	D
S-27	6620/50	499 (500-1)	6620/60 499 (500-1¼)	6620-1½ 499 (500-1½)
CIRCLING	6660-1	504 (600-1)	6660-1½ 504 (600-1½)	6720-2 564 (600-2)

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	7985
CH 73009	085°	TDZE	6143
W09A		Apt Elev	6159

RNAV (GPS) RWY 9

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

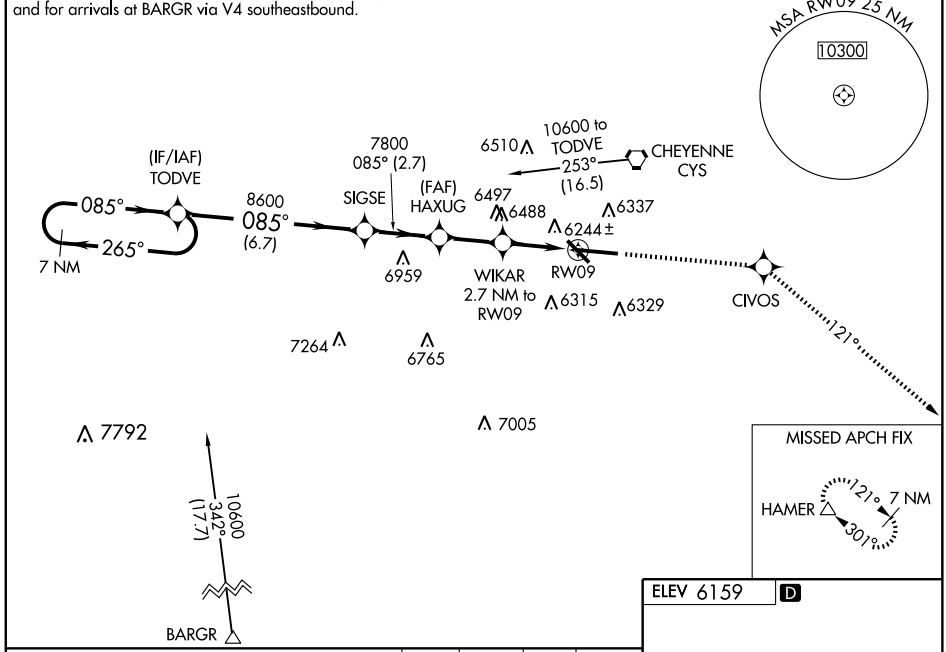
T A ASR/PAR

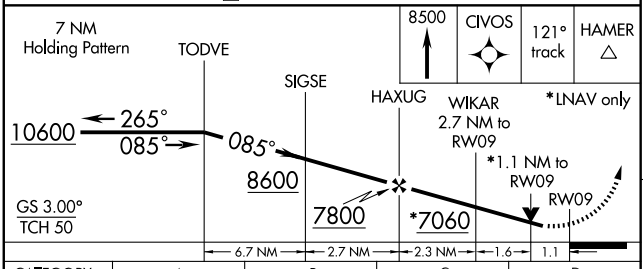
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 36°C (96°F).
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Laramie altimeter setting and increase all DA 251 feet, all MDA 260 feet, and all visibilities ¾ mile.
VDP and Baro-VNAV NA when using Laramie altimeter setting.

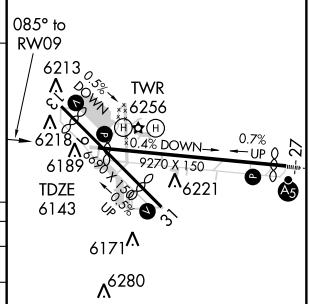
MISSED APPROACH: Climb to 8500 direct CIVOS and via 121° track to HAMER and hold.

ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95

Procedure NA for arrivals at CYS VORTAC via airway radials 267 CW 292, and for arrivals at BARGR via V4 southeastbound.







CATEGORY	A	B	C	D
LPV DA	6473-1¼ 330 (400-1¼)			
LNAV/VNAV DA	6542-1½ 399 (400-1½)			
LNAV MDA	6540-1 397 (400-1)			6540-1¼ 397 (400-1¼)
CIRCLING	6660-1 501 (600-1)		6660-1½ 501 (600-1½)	6720-2 561 (600-2)

REIL Rwys 9, 13, and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	4469
CH 56609	125°	TDZE	6154
W13A		Apt Elev	6159

RNAV (GPS) RWY 13

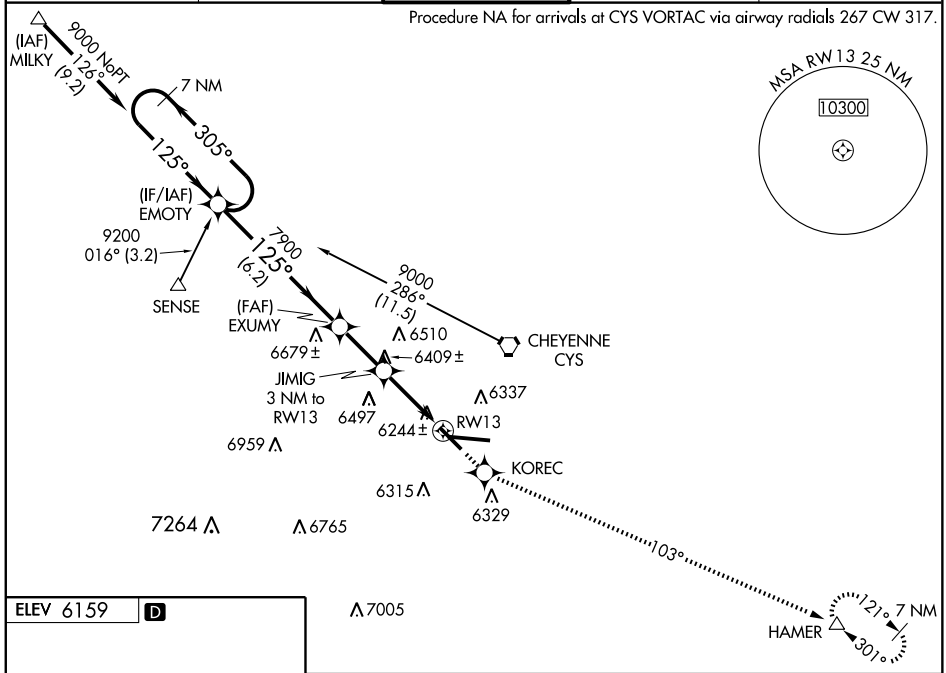
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

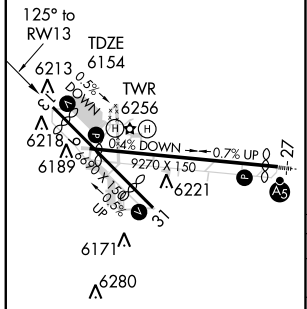
T Baro-VNAV NA when using Laramie altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 36°C (96°F).
A ASR/PAR DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Laramie altimeter setting and increase all DA/MDA 260 feet and all visibilities 1 mile.

MISSED APPROACH: Climb to 8500 direct KOREC and via 103° track to HAMER and hold.

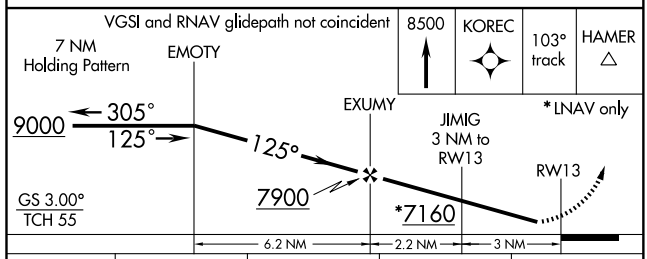
ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95

Procedure NA for arrivals at CYS VORTAC via airway radials 267 CW 317.





REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	6481-1 327 (400-1)			
LNAV/VNAV DA	6539-1¼ 385 (400-1¼)			
LNAV MDA	6660-1 506 (600-1)		6660-1½ 506 (600-1½)	
CIRCLING	6660-1 501 (600-1)		6660-1½ 501 (600-1½)	6720-2 561 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 70307 W27A	APP CRS 265°	Rwy Idg 7985 TDZE 6121 Apt Elev 6160

RNAV (GPS) RWY 27

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

ASR/PAR

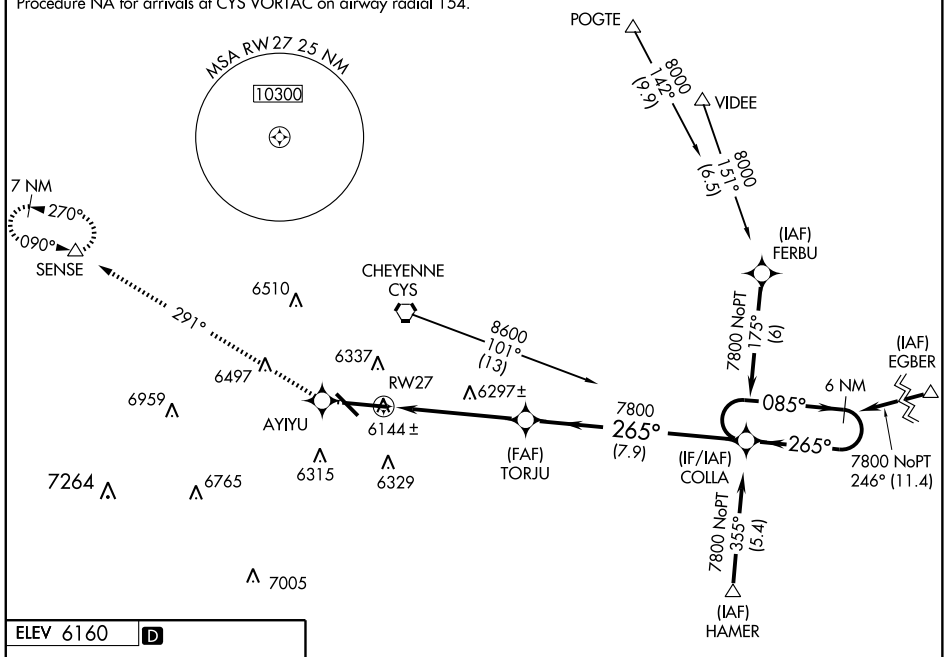
Baro-VNAV NA below -27°C (-16°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 10300 direct AYIYU and via 291° track to SENSE and hold, continue climb-in-hold to 10300.

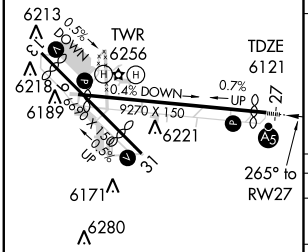
ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95

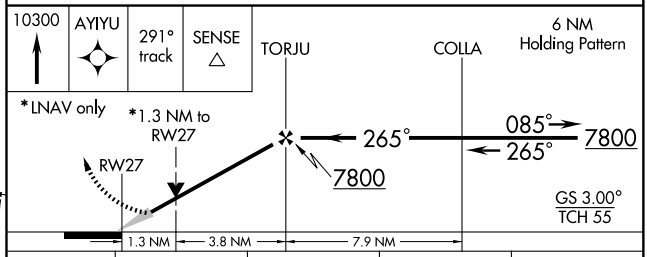
Procedure NA for arrivals at CYS VORTAC on airway radial 154.



NW-1, 14 JAN 2010 to 11 FEB 2010

ELEV 6160 D





CATEGORY	A	B	C	D
LPV DA	6380/24 259 (300-½)			
LNAV/VNAV DA	6480/40 359 (400-¾)			
LNAV MDA	6560/24 439 (500-½)		6560/40 439 (500-¾)	6560/50 439 (500-1)
CIRCLING	6660-1 500 (500-1)		6660-1½ 500 (500-1½)	6720-2 560 (600-2)

REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

WAAS	APP CRS	Rwy Idg	4469
CH 99609	305°	TDZE	6147
W31A		Apt Elev	6159

RNAV (GPS) RWY 31

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

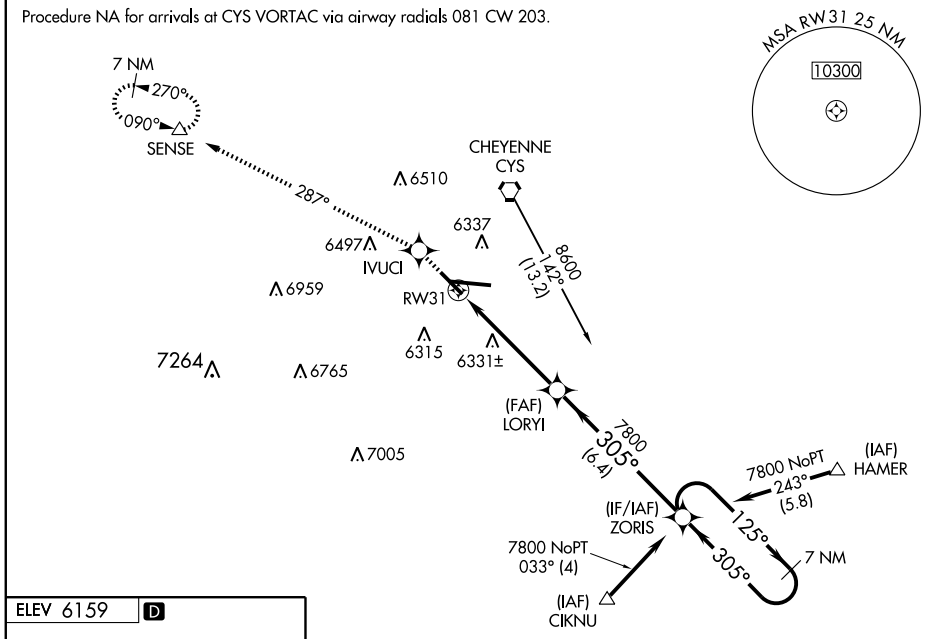
T A ASR/PAR

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 36°C (96°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
VDP and Baro-VNAV NA when using Laramie altimeter setting.
When local altimeter setting not received, use Laramie altimeter setting and increase all DA/MDA 260 feet and all visibilities ¾ mile.

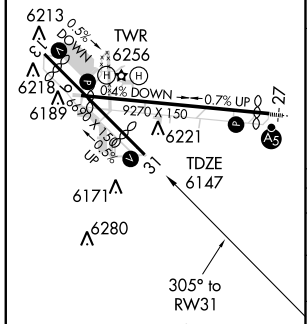
MISSED APPROACH: Climb to 10300 direct IVUCI and via 287° track to SENSE and hold, continue climb-in-hold to 10300.

ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95

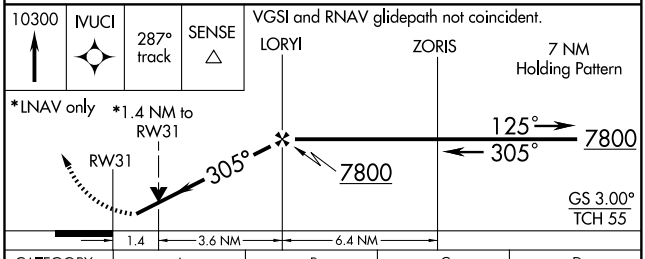
Procedure NA for arrivals at CYS VORTAC via airway radials 081 CW 203.



ELEV 6159 D



REIL Rwys 9, 13 and 31 L
HIRL Rwys 9-27 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	6397-1 250 (300-1)			
LNAV/VNAV DA	6545-1½ 398 (400-1½)			
LNAV MDA	6600-1 453 (500-1)		6600-1¼ 453 (500-1¼)	6600-1½ 453 (500-1½)
CIRCLING	6660-1 501 (600-1)		6660-1½ 501 (600-1½)	6720-2 561 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC CYS 113.1 Chan 78	APP CRS 196°	Rwy Idg N/A TDZE N/A Apt Elev 6156

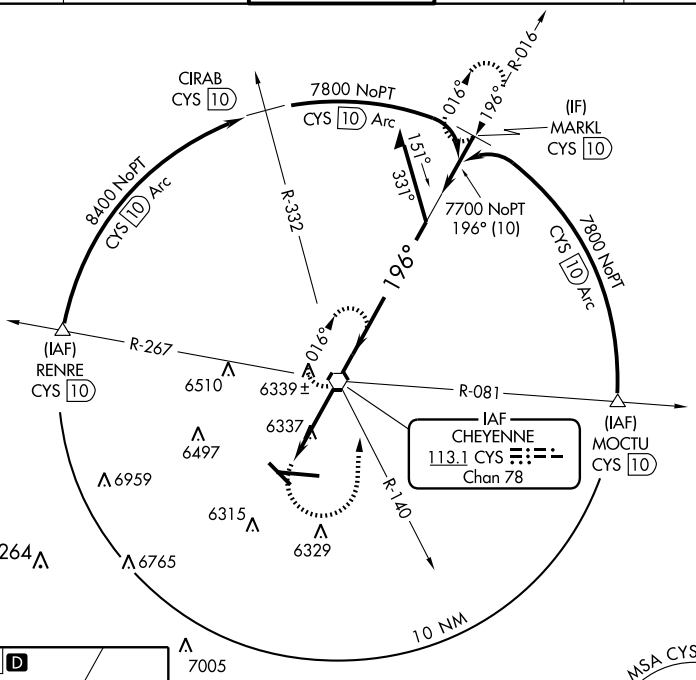
VOR or TACAN-A

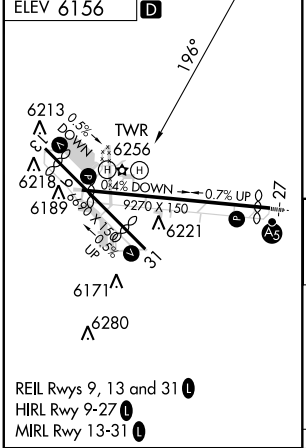
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

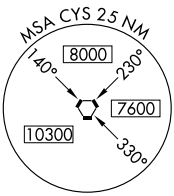
ASR/PAR

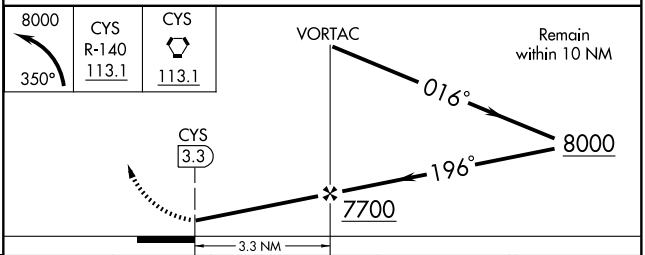
MISSED APPROACH: Climbing left turn to 8000 via heading 350° and CYS VORTAC R-140 to CYS VORTAC and hold, continue climb-in-hold to 8000 (TACAN aircraft continue via CYS R-016 to MARKL/10 DME and hold N, RT, 196° inbound.)

ATIS	CHEYENNE APP CON	CHEYENNE TOWER ★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95









FAF to MAP 3.3 NM					
Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

CATEGORY	A	B	C	D
CIRCLING	6660-1	504 (600-1)	6660-1½ 504 (600-1½)	6720-2 564 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
306°	TDZE	N/A
	Apt Elev	5098

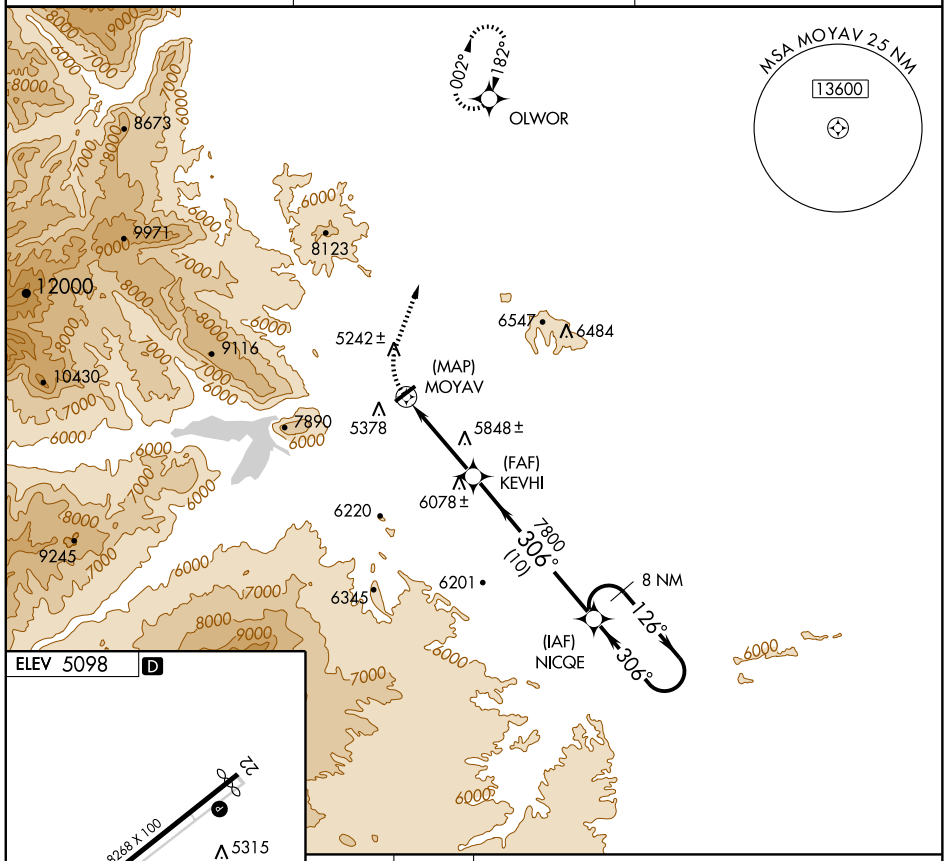
GPS-B

CODY/ YELLOWSTONE RGNL (COD)

T
NA

MISSED APPROACH: Climbing right turn to 6800 via 001° course to OLWOR WP and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
135.075	133.25 285.6	122.8 (CTAF) L



REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

CATEGORY	A	B	C	D
CIRCLING	6100-1¼ 1002 (1100-1¼)	6100-1½ 1002 (1100-1½)	6100-3 1002 (1100-3)	

WAAS CH 93600 W22A	APP CRS 218°	Rwy Idg 7178 TDZE 5076 Apt Elev 5102

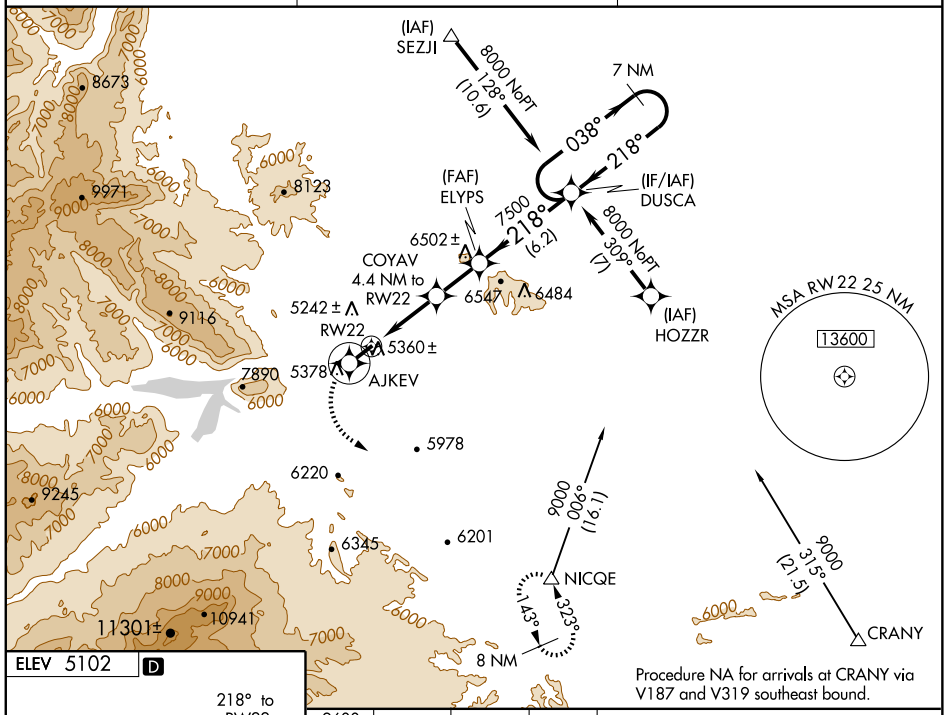
RNAV (GPS) RWY 22

CODY/ YELLOWSTONE RGNL (COD)

DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 9600 direct AJKEV and left turn via 123° track to NICQE and hold.

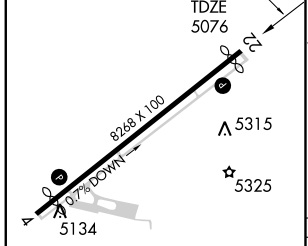
AWOS-3	SALT LAKE CENTER	UNICOM
135.075	133.25 285.6	122.8 (CTAF) L



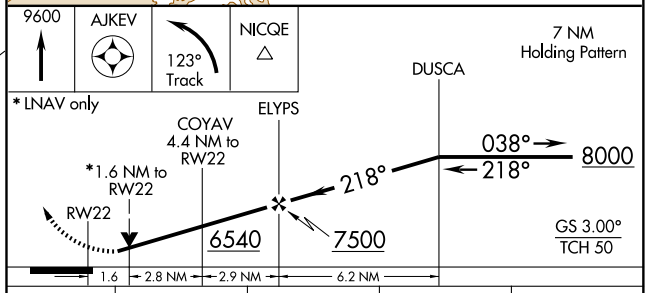
Procedure NA for arrivals at CRANY via V187 and V319 southeast bound.

NW-1, 14 JAN 2010 to 11 FEB 2010

ELEV 5102 D



REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L



CATEGORY	A	B	C	D
LPV DA	5457-1¼ 381 (400-1¼)			
LNAV/ VNAV DA	NA			
LNAV MDA	5620-1 544 (600-1)		5620-1½ 544 (600-1½)	5620-1¾ 544 (600-1¾)
CIRCLING	5840-1¼ 738 (800-1¼)		5900-2¼ 798 (800-2¼)	5960-2¾ 858 (900-2¾)

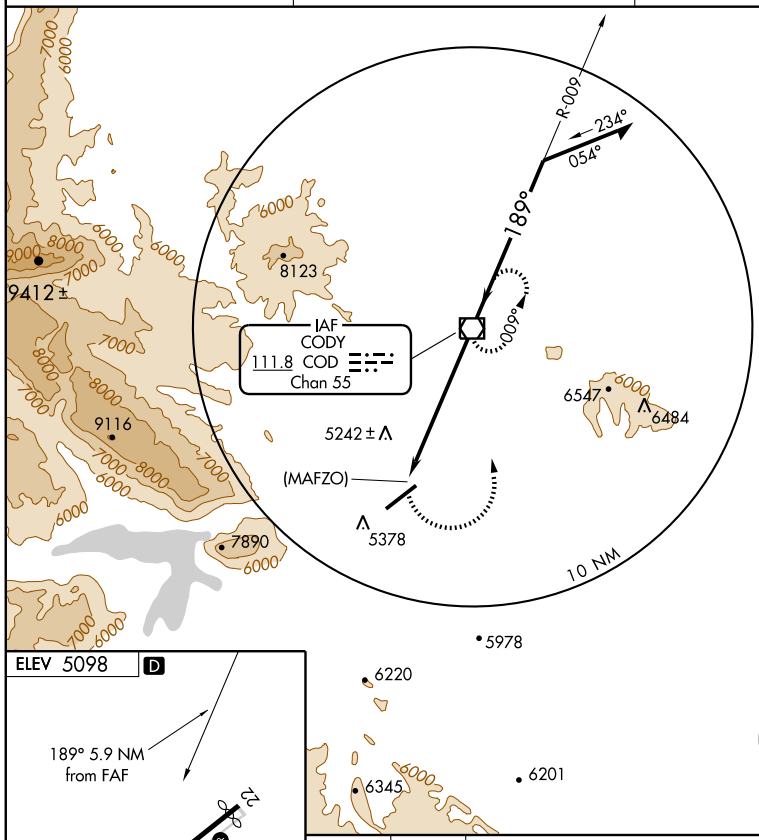
VOR/DME COD	APP CRS	Rwy Idg	N/A
111.8	189°	TDZE	N/A
Chan 55		Apt Elev	5098

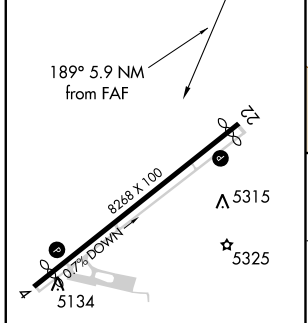
VOR or GPS-A

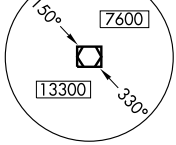
CODY/ YELLOWSTONE RGNL (COD)

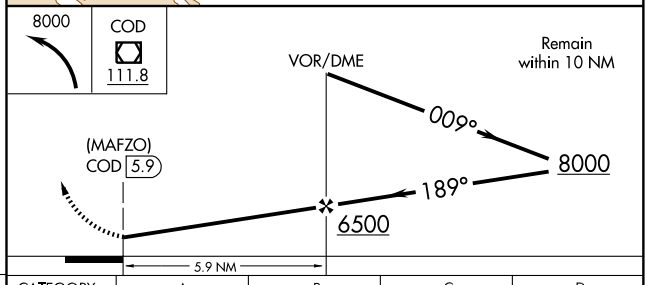
MISSED APPROACH: Climbing left turn to 8000 direct COD VOR/DME and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
135.075	133.25 285.6	122.8 (CTAF) L









REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
CIRCLING	5800-1	701 (800-1)	5800-2 701 (800-2)	5920-2¾ 821 (900-2¾)

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB HCY	APP CRS	Rwy Idg	5199
257	078°	TDZE	4080
		Apt Elev	4090

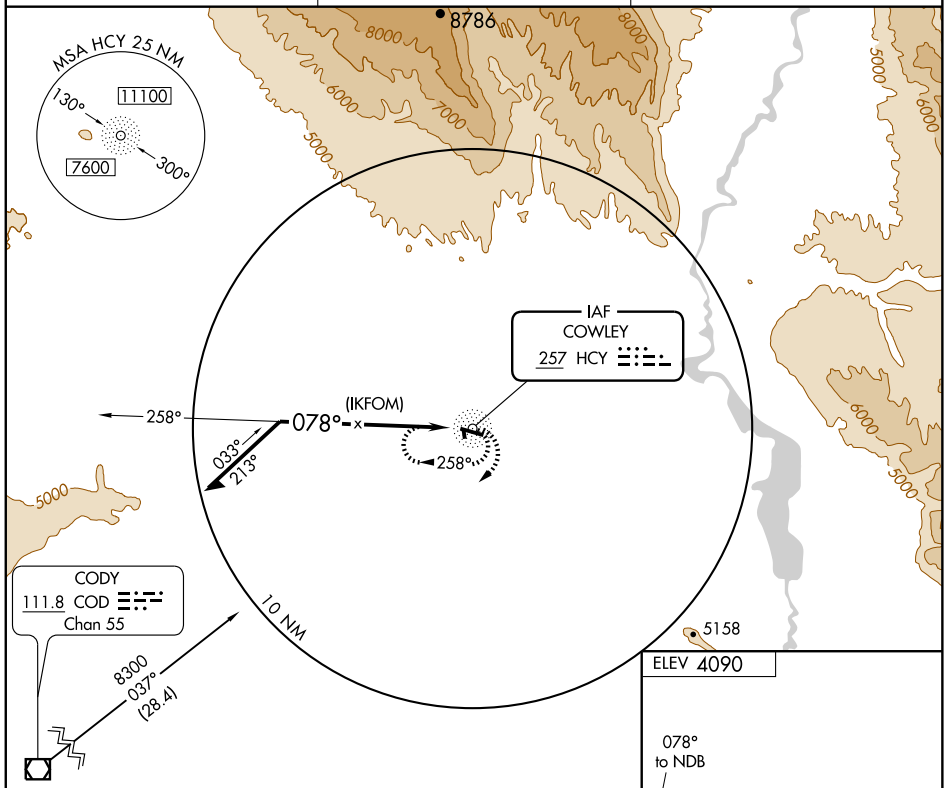
NDB or GPS RWY 9

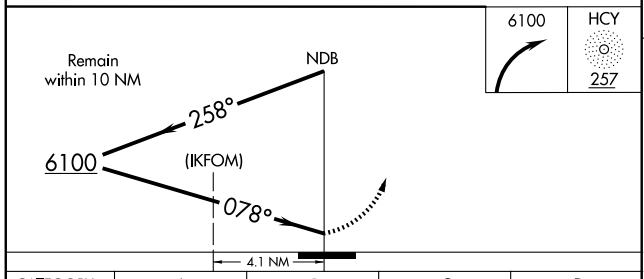
COWLEY/ NORTH BIG HORN COUNTY (U68)

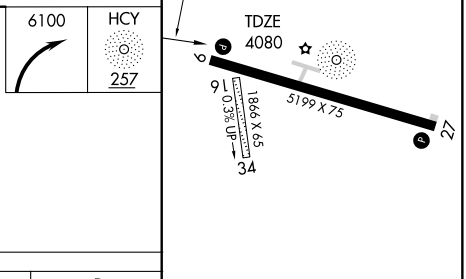
Obtain local altimeter setting on CTAF; when not received, procedure NA.

MISSED APPROACH: Climbing right turn to 6100 in HCY NDB holding pattern.

AWOS-3	SALT LAKE CENTER	UNICOM
119.925	133.25 285.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-9	4860-1 780 (800-1)	4860-1¼ 780 (800-1¼)	4860-2¼ 780 (800-2¼)	4860-2½ 780 (800-2½)
CIRCLING	4860-1 770 (800-1)	4860-1¼ 770 (800-1¼)	4860-2¼ 770 (800-2¼)	4860-2½ 770 (800-2½)

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6534
287°	TDZE	4933
	Apt Elev	4933

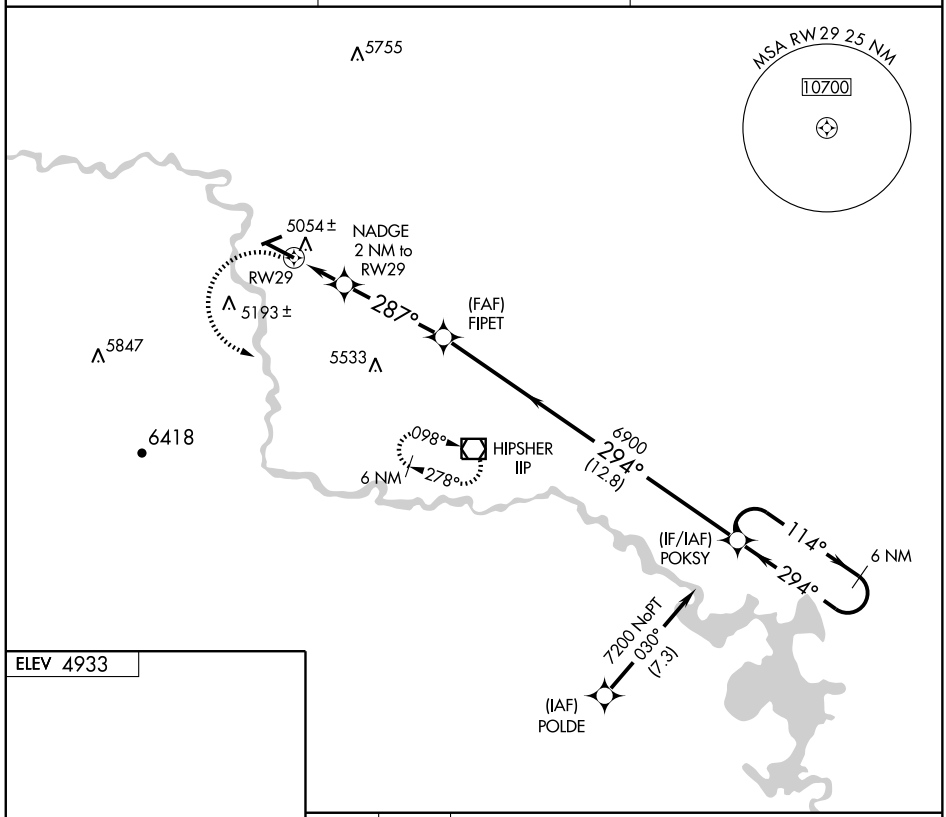
RNAV (GPS) RWY 29

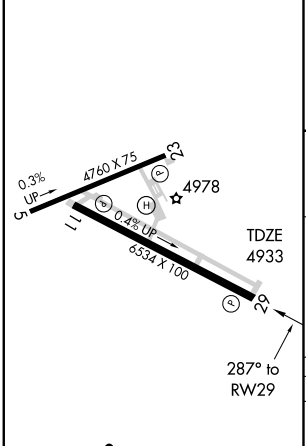
DOUGLAS / CONVERSE COUNTY (DGW)

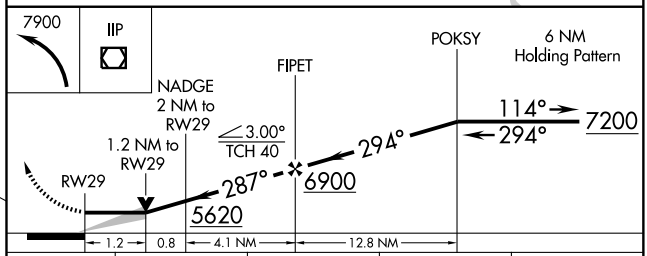
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 7900 direct IIP VOR/DME and hold, continue-in-hold to 7900.

ASOS	DENVER CENTER	UNICOM
135.225	135.6 363.025	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	5360-1 427 (500-1)		5360-1¼ 427 (500-1¼)	5360-1½ 427 (500-1½)
CIRCLING	5520-1 587 (600-1)		5520-1½ 587 (600-1½)	5540-2 607 (700-2)

REIL Rwy 29 L
MIRL Rwys 11-29 and 5-23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

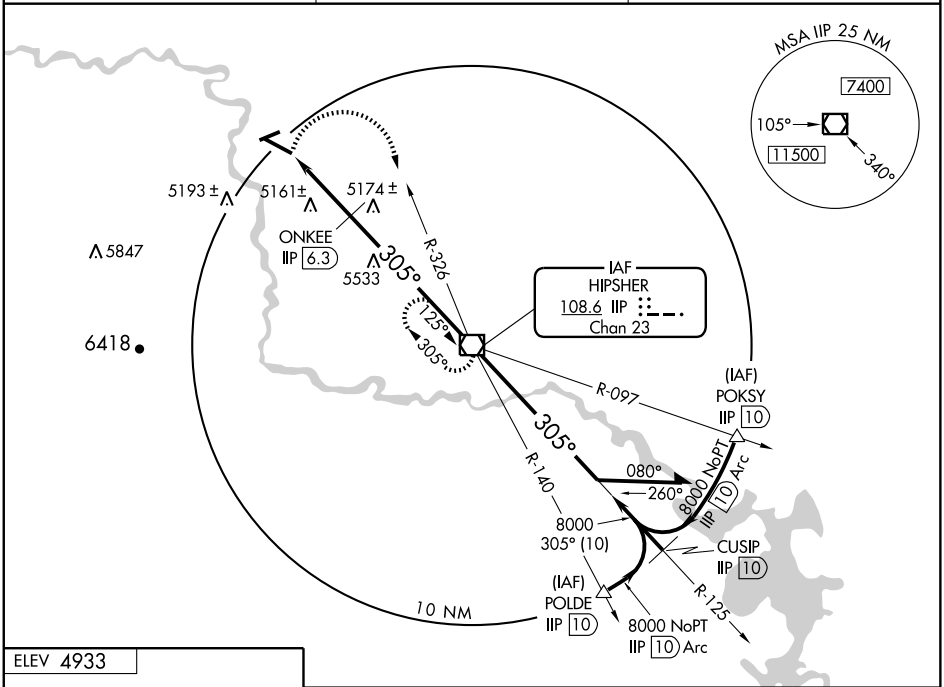
VOR/DME IIP	APP CRS	Rwy Idg	6534
108.6	305°	TDZE	4933
Chan 23		Apt Elev	4933

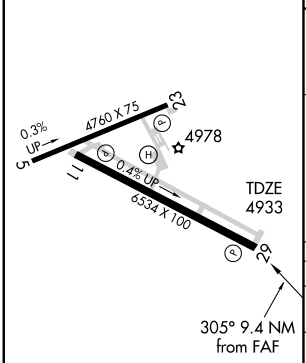
VOR RWY 29

DOUGLAS / CONVERSE COUNTY (DGW)

MISSED APPROACH: Climbing right turn to 8000 via heading 160° and IIP VOR/DME R-326 to IIP VOR/DME and hold, continue climb-in-hold to 8000.

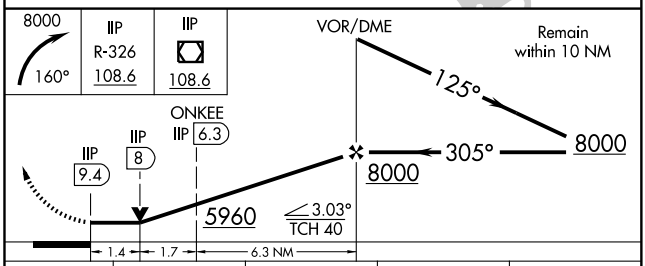
ASOS	DENVER CENTER	UNICOM
135.225	135.6 363.025	122.8 (CTAF) L





REIL Rwy 29 L
MIRL Rwys 11-29 and 5-23 L

FAF to MAP 9.4 NM					
Knots	60	90	120	150	180
Min:Sec	9:24	6:16	4:42	3:46	3:08



CATEGORY	A	B	C	D
S-29	5960-1¼ 1027 (1100-1¼)	5960-1½ 1027 (1100-1½)	5960-3 1027 (1100-3)	
CIRCLING	5960-1¼ 1027 (1100-1¼)	5960-1½ 1027 (1100-1½)	5960-3 1027 (1100-3)	
ONKEE FIX MINIMUMS				
S-29	5420-1 487 (500-1)		5420-1¼ 487 (500-1¼)	5420-1½ 487 (500-1½)
CIRCLING	5520-1 587 (600-1)		5520-1½ 587 (600-1½)	5540-2 607 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

EVANSTON, WYOMING

AL-6858 (FAA)

LOC/DME I-EVW	APP CRS	Rwy Idg	7300
108.9	234°	TDZE	7143
Chan 26		Apt Elev	7143

ILS or LOC/DME RWY 23

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

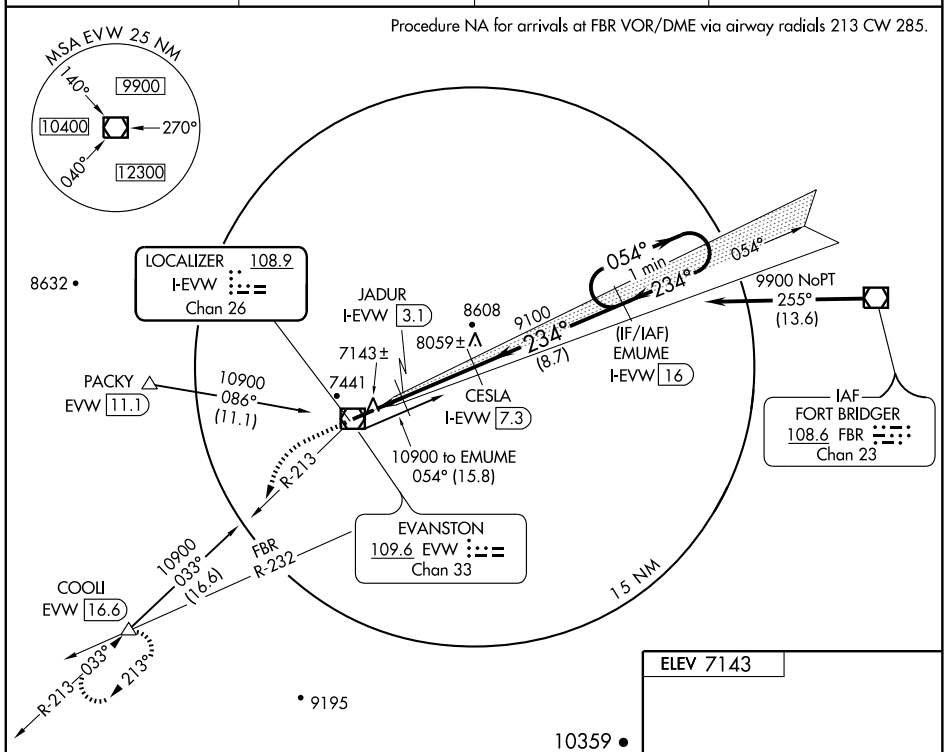
For inoperative MALSR, increase S-LOC 23 Cat D visibility to 1 mile. When local altimeter setting not received, procedure NA.

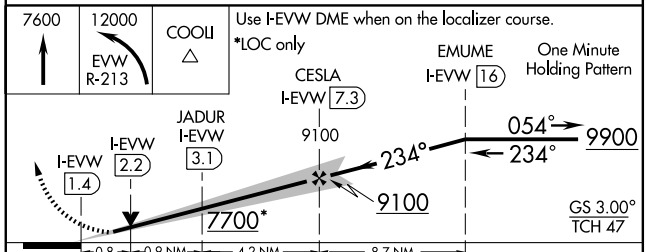
MALSR

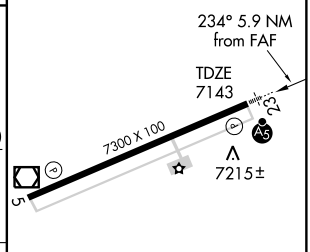
MISSED APPROACH: Climb to 7600 then climbing left turn to 12000 via EVW VOR/DME R-213 to COOLI/EVW VOR/DME 16.6 DME and hold, continue climb-in-hold to 12000.

ASOS	SALT LAKE CENTER	GCO	UNICOM
120.0	127.7 354.125	121.72	123.0 (CTAF) L

Procedure NA for arrivals at FBR VOR/DME via airway radials 213 CW 285.







CATEGORY	A	B	C	D
S-ILS 23	7343-½ 200 (200-½)			
S-LOC 23	7440-½ 297 (300-½)			7440-¾ 297 (300-¾)
CIRCLING	7580-1 437 (500-1)	7720-1 577 (600-1)	7760-1¾ 617 (700-1¾)	7760-2 617 (700-2)

REIL Rwys 5 and 23 L

HIRL Rwy 5-23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 78302 W05A	APP CRS 054°	Rwy Idg 7300 TDZE 7141 Apt Elev 7143

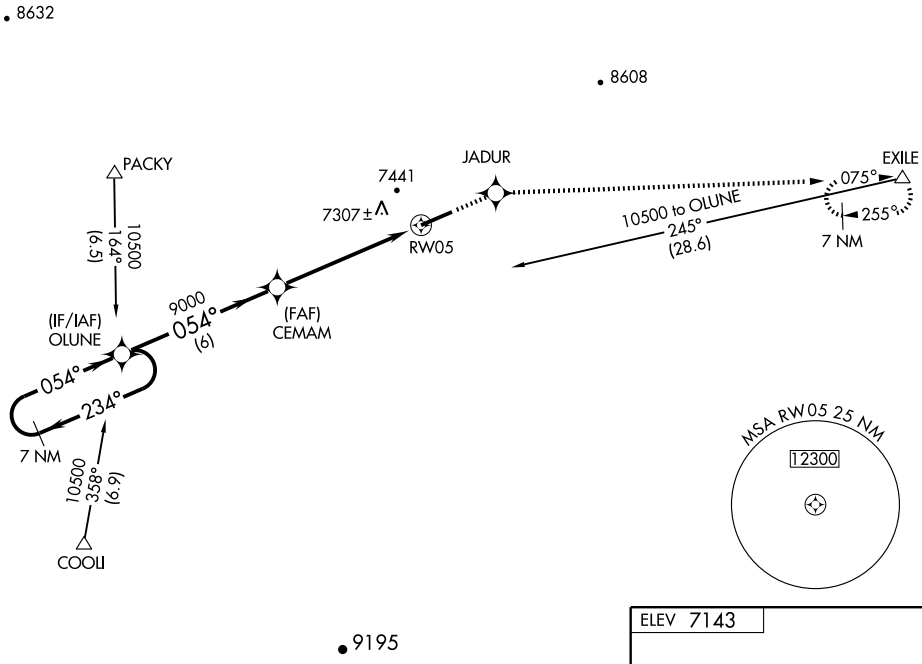
RNAV (GPS) RWY 5

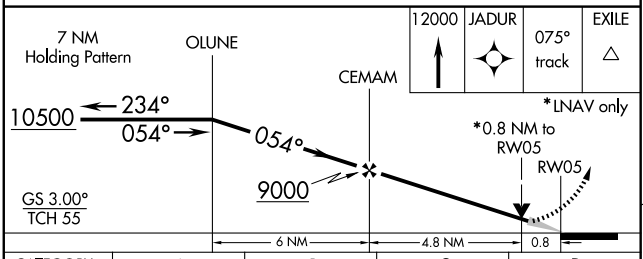
EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

If local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (94°F).
DME/DME RNP- 0.3 NA.

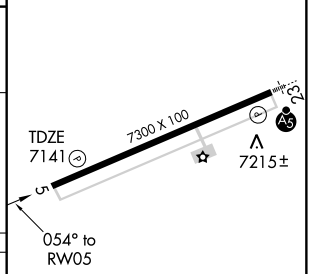
MISSED APPROACH: Climb to 12000 direct JADUR and via 075° track to EXILE and hold, continue climb-in-hold to 12000.

ASOS	SALT LAKE CENTER	GCO	UNICOM
120.0	127.7 354.125	121.72	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	7391-¾ 250 (300-¾)			
LNAV/VNAV DA	7643-1¾ 502 (500-1¾)			
LNAV MDA	7440-1 299 (300-1)			
CIRCLING	7580-1¾ 437 (500-1¾)	7720-1¾ 577 (600-1¾)	7760-1¾ 617 (700-1¾)	7760-2 617 (700-2)



REIL Rwys 5 and 23 L
HIRL Rwy 5-23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 77905 W23A	APP CRS 234°	Rwy Idg 7300 TDZE 7143 Apt Elev 7143

RNAV (GPS) RWY 23

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

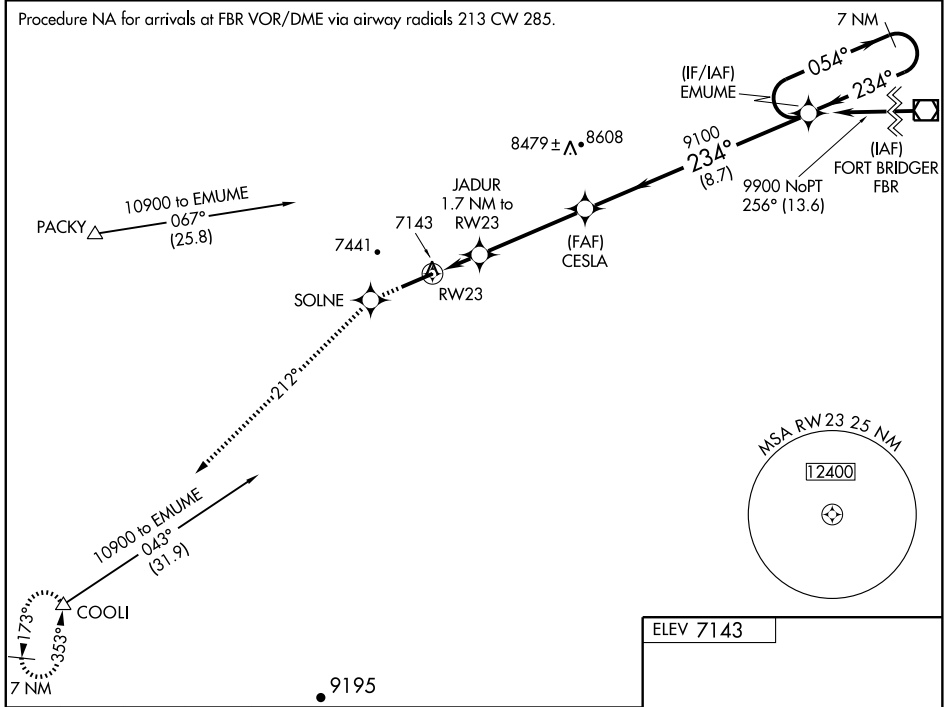
For inoperative MALSR, increase LPV all Cats. visibility to 1, LNAV/VNAV Cat. D to 1 and LNAV Cat. D to 1¼.
When local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (93°F). DME/DME RNP- 0.3 NA.

MALSR

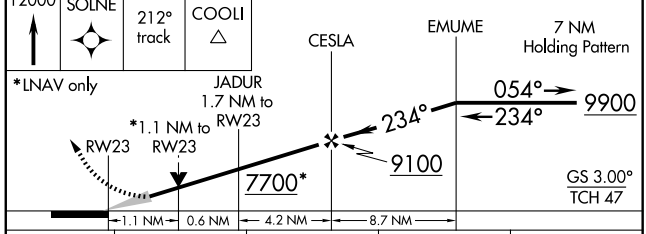
MISSED APPROACH: Climb to 12000 direct SOLNE and via 212° track to COOLI and hold, continue climb-in-hold to 12000.

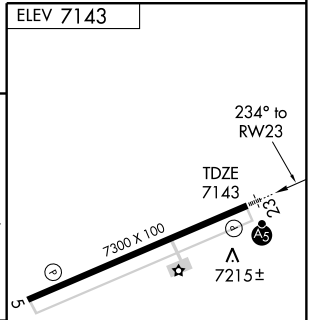
ASOS	SALT LAKE CENTER	GCO	UNICOM
120.0	127.7 354.125	121.72	123.0 (CTAF) L

Procedure NA for arrivals at FBR VOR/DME via airway radials 213 CW 285.



12000	SOLNE	212° track	COOLI





CATEGORY	A	B	C	D
LPV DA	7393-½ 250 (300-½)			
LNAV/VNAV DA	7443-½ 300 (300-½)			7443-¾ 300 (300-¾)
LNAV MDA	7520-½ 377 (400-½)			7520-1 377 (400-1)
CIRCLING	7580-1 437 (500-1)	7720-1 577 (600-1)	7760-1¾ 617 (700-1¾)	7760-2 617 (700-2)

REIL Rwys 5 and 23 L
HIRL Rwy 5-23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME EVW	APP CRS	Rwy Idg	7300
109.6	044°	TDZE	7141
Chan 33		Apt Elev	7143

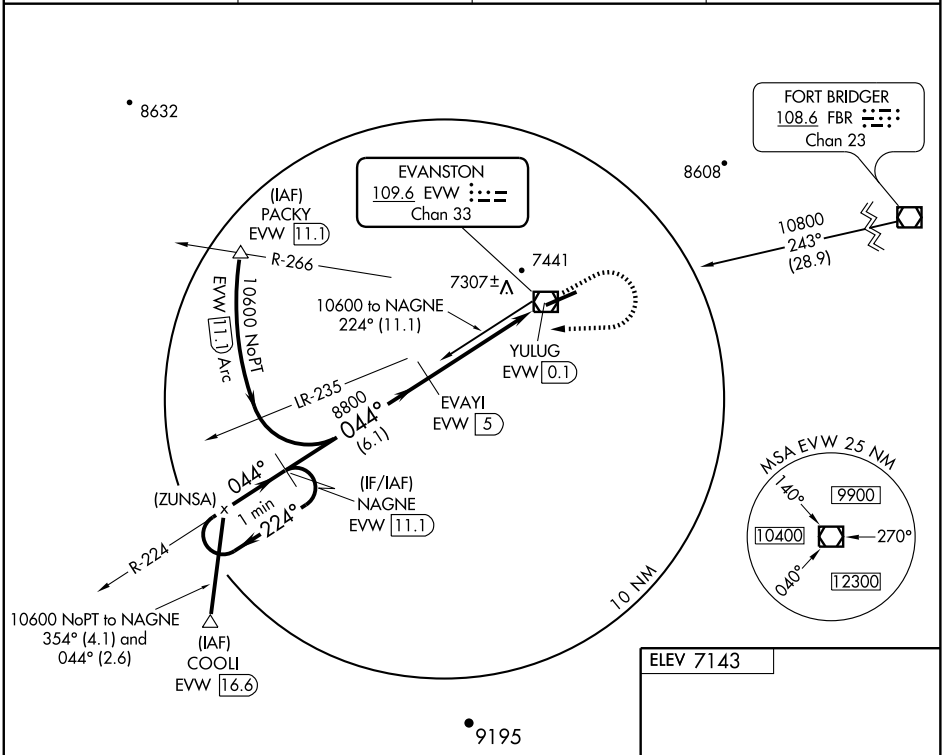
VOR/DME RWY 5

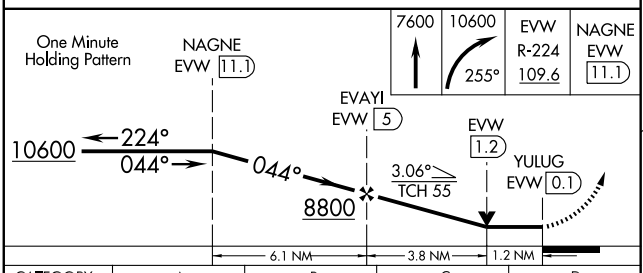
EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

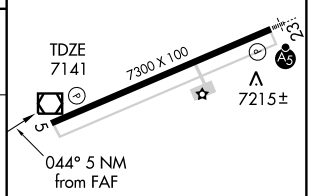
If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 7600, then climbing right turn to 10600 via heading 255° and EVW VOR/DME R-224 to NAGNE/11.1 DME and hold, continue climb-in-hold to 10600.

ASOS	SALT LAKE CENTER	GCO	UNICOM
120.0	127.7 354.125	121.72	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-5	7560-1	419 (500-1)	7560-1¼	419 (500-1¼)
CIRCLING	7580-1 437 (500-1)	7720-1 577 (600-1)	7760-1¾ 617 (700-1¾)	7760-2 617 (700-2)

REIL Rwys 5 and 23 L
HIRL Rwy 5-23 L

VOR/DME EVW	APP CRS	Rwy Idg	7300
109.6	237°	TDZE	7143
Chan 33		Apt Elev	7143

VOR/DME RWY 23

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

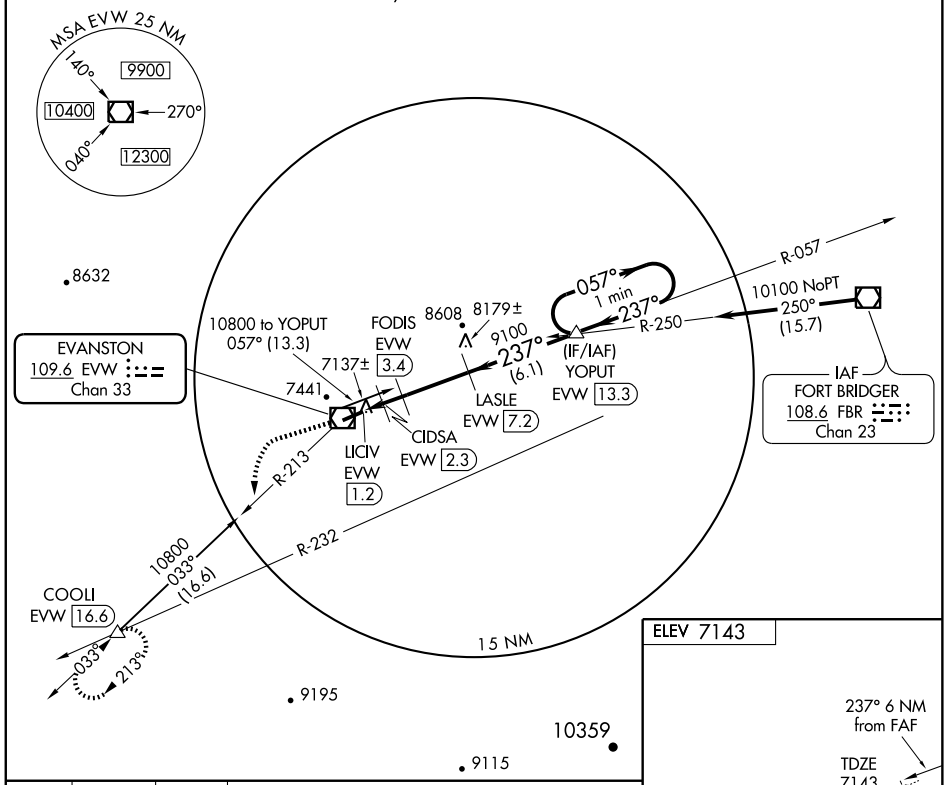
For inoperative MALSR, increase S-23 Cat. D visibility to 1¼ mile.
If local altimeter setting not received, procedure NA.

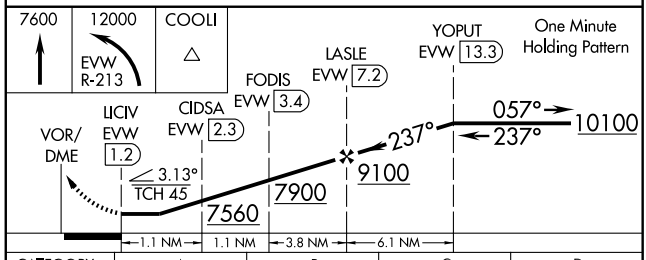
MALSR

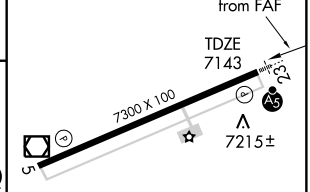
MISSED APPROACH: Climb to 7600 then climbing left turn to 12000 via EVW VOR/DME R-213 to COOLI/16.6 DME and hold, continue climb-in-hold to 12000.

ASOS	SALT LAKE CENTER	GCO	UNICOM
120.0	127.7 354.125	121.72	123.0 (CTAF) L

Procedure NA for arrivals at FBR VOR/DME via airway radials 213 CW 285.







CATEGORY	A	B	C	D
S-23	7500-½ 357 (400-½)			7500-1 357 (400-1)
CIRCLING	7580-1 437 (500-1)	7720-1 577 (600-1)	7760-1¾ 617 (700-1¾)	7760-2 617 (700-2)

REIL Rwys 5 and 23 L
HIRL Rwy 5-23 L

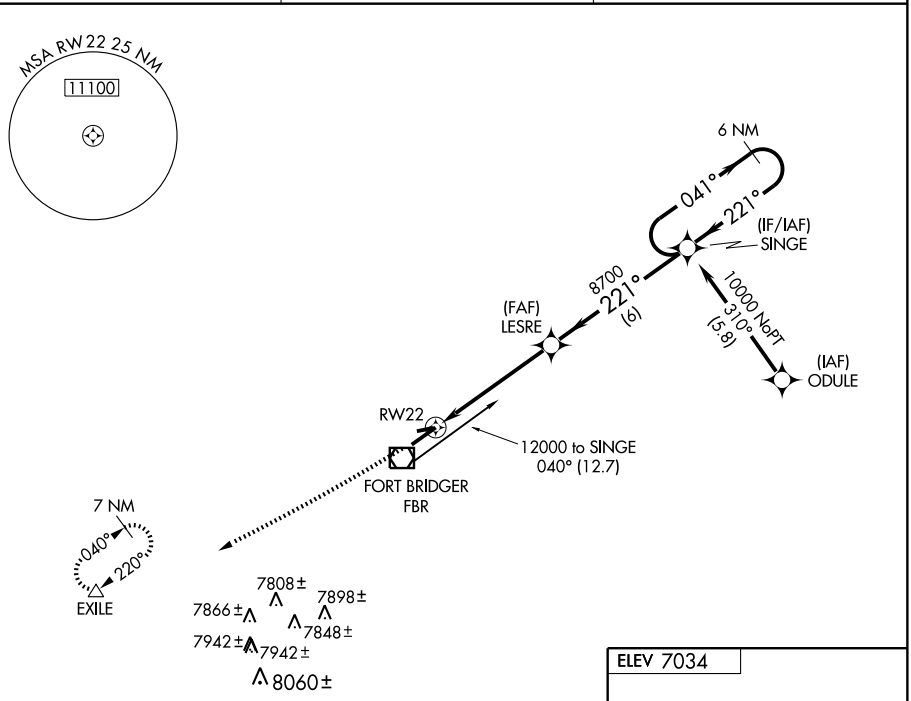
APP CRS	Rwy Idg	6402
221°	TDZE	7018
	Apt Elev	7034

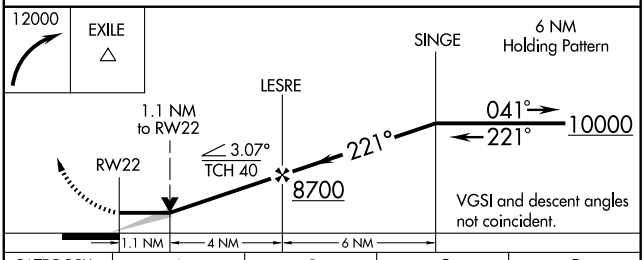
RNAV (GPS) RWY 22
FORT BRIDGER (FBR)

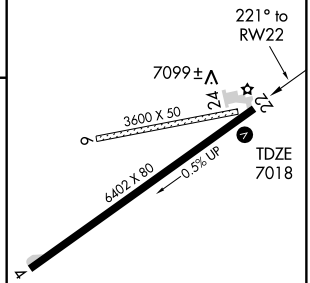
T
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA

MISSED APPROACH: Climbing right turn to 12000 direct EXILE WP and hold.

AWOS-1	CASPER RADIO	UNICOM
118.8	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7360-1 342 (400-1)			7360-1¼ 342 (400-1¼)
CIRCLING	7480-1 446 (500-1)	7500-1 466 (500-1)	7500-1½ 466 (500-1½)	7600-2 566 (600-2)

REIL Rwy 22 L
MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

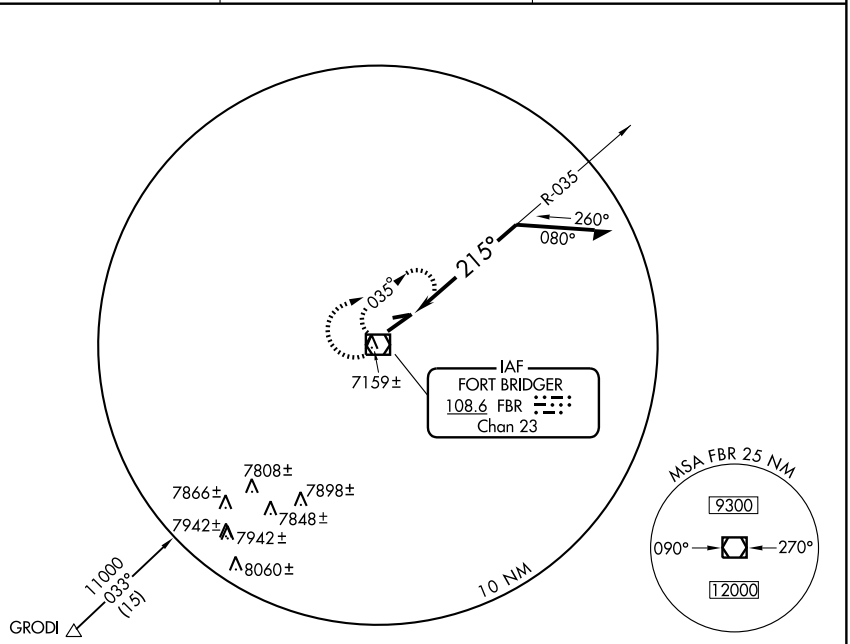
VOR/DME FBR	APP CRS	Rwy Idg	6402
108.6	215°	TDZE	7018
Chan 23		Apt Elev	7034

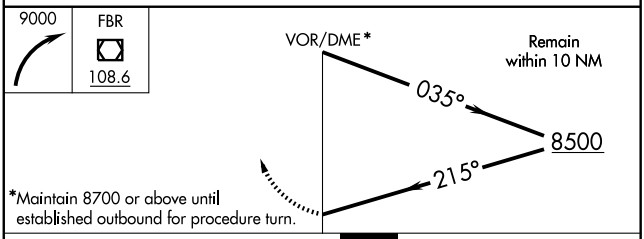
VOR RWY 22
FORT BRIDGER (FBR)

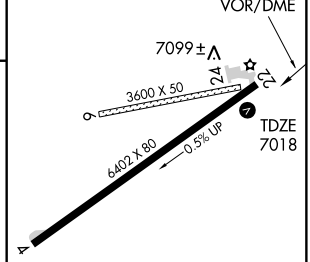
NA If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing right turn to 9000 in FBR VOR/DME holding pattern.

AWOS-1	CASPER RADIO	UNICOM
118.8	122.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-22	7440-1 422 (500-1)		7440-1¼ 422 (500-1¼)	
CIRCLING	7480-1 446 (500-1)	7500-1 466 (500-1)	7500-1½ 466 (500-1½)	7600-2 566 (600-2)

REIL Rwy 22 L
MIRL Rwy 4-22 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-LLT	APP CRS	Rwy Idg	7500
110.1	338°	TDZE	4365
Chan 38		Apt Elev	4365

ILS or LOC RWY 34

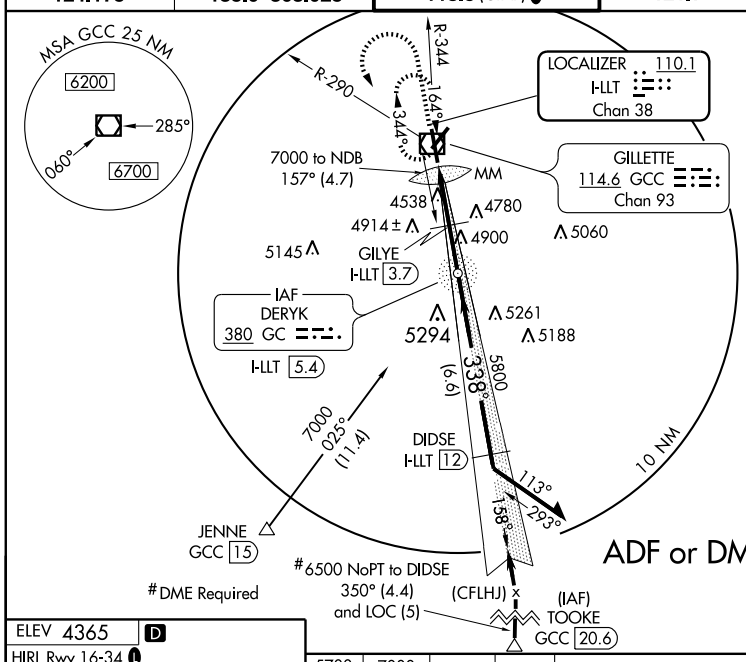
GILLETTE-CAMPBELL COUNTY (GCC)

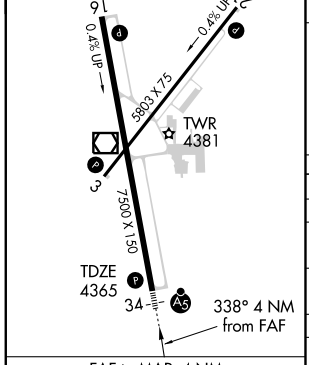
For inoperative MALSR, increase S-LOC Cat A, and GILYE FIX MINIMUMS S-LOC Cat A/B visibilities to 1. Inoperative table does not apply to S-ILS 34. When VGSI inoperative, circling Rwy 3 NA at night. If local altimeter setting not received, procedure NA. ADF or DME required.

MALSR

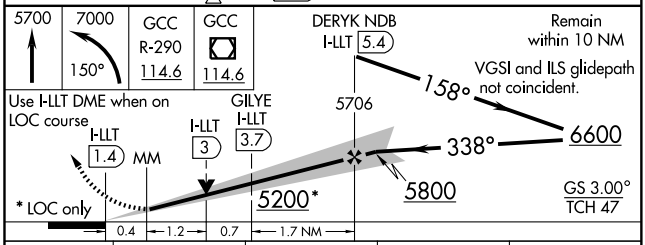
MISSED APPROACH: Climb to 5700 then climbing left turn to 7000 via heading 150° and GCC VOR/DME R-290 to GCC VOR/DME and hold, continue climb-in-hold to 7000.

ASOS	DENVER CENTER	GILLETTE TOWER★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95





FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
S-ILS 34	4565-¾ 200 (200-¾)			
S-LOC 34	5200-¾ 835 (900-¾)		5200-2 835 (900-2)	5200-2¼ 835 (900-2¼)
CIRCLING	5200-1 835 (900-1)	5200-1¼ 835 (900-1¼)	5200-2½ 835 (900-2½)	5280-3 915 (1000-3)
GILYE FIX MINIMUMS				
S-LOC 34	4940-¾ 575 (600-¾)		4940-1 575 (600-1)	4940-1¼ 575 (600-1¼)
CIRCLING	5040-1 675 (700-1)		5120-2¼ 755 (800-2¼)	5280-3 915 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

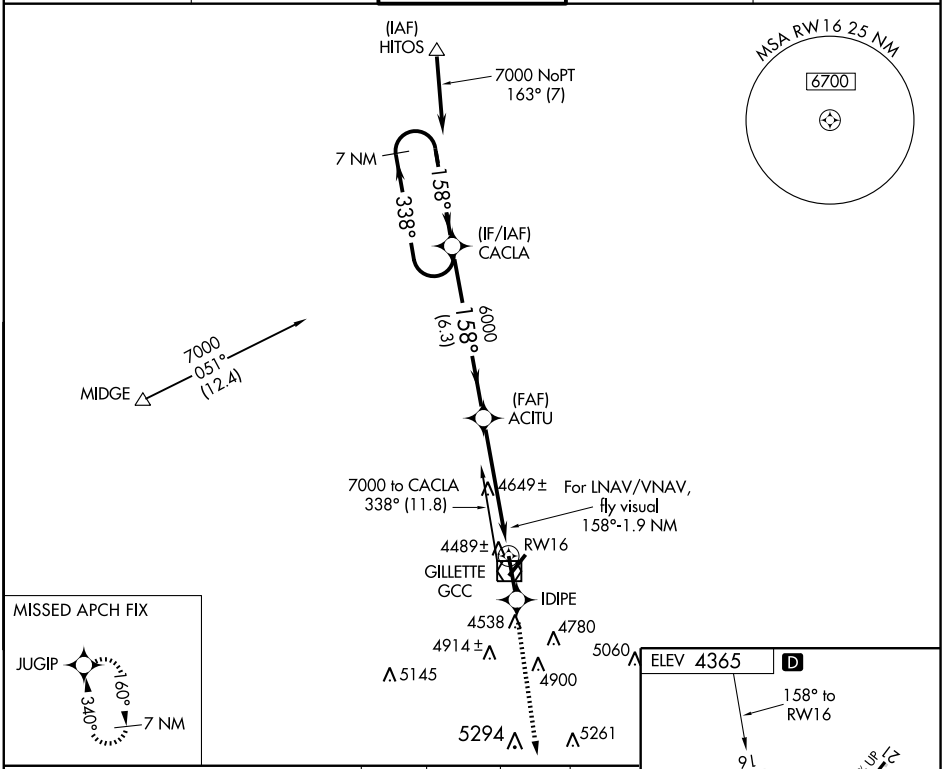
WAAS	APP CRS	Rwy Idg	7500
Chan **86221**	**158°**	TDZE	**4337**
W16A		Apt Elev	**4365**

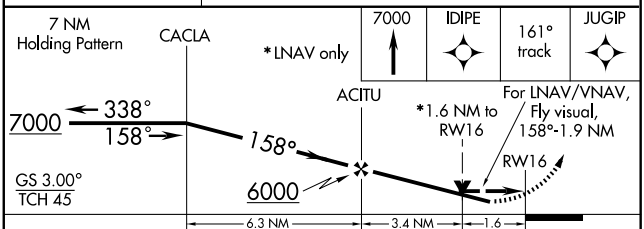
RNAV (GPS) RWY 16
GILLETTE-CAMPBELL COUNTY (GCC)

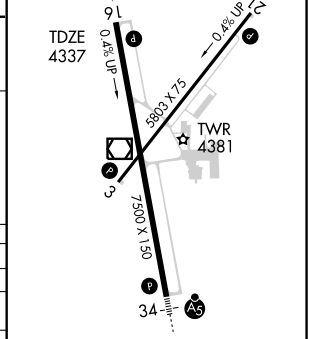
DME/DME RNP- 0.3 NA. Baro-VNAV NA below -23°C (-9°F).
If local altimeter setting not received, procedure NA.
When VGSI inoperative, circling Rwy 3 NA at night.

MISSED APPROACH: Climb to 7000 direct IDIPE and via 161° track to JUGIP and hold.

ASOS	DENVER CENTER	GILLETTE TOWER ★	GND CON	UNICOM
124.175	**135.6 363.025**	**118.5** (CTAF) L	**121.7**	**122.95**







CATEGORY	A	B	C	D
LPV DA	4660-1¼ 323 (300-1¼)			
LNAV/VNAV DA	4980-2 643 (700-2)			
LNAV MDA	4900-1 563 (600-1)		4900-1½ 563 (600-1½)	4900-1¾ 563 (600-1¾)
CIRCLING	5040-2¼ 675 (700-2¼)		5120-2¼ 755 (800-2¼)	5280-3 915 (1000-3)

HIRL Rwy 16-34 L
REIL Rwys 3,16 and 21
MIRL Rwy 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS	APP CRS	Rwy Idg	7500
Chan 86204	338°	TDZE	4365
W34A		Apt Elev	4365

RNAV (GPS) RWY 34

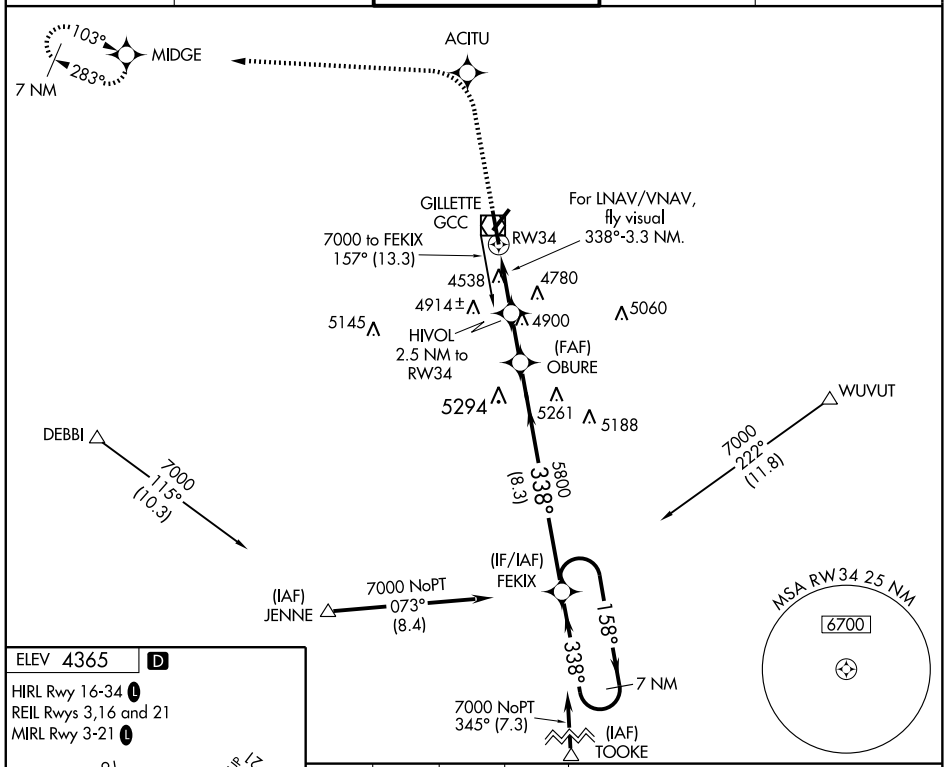
GILLETTE-CAMPBELL COUNTY (GCC)

T A Inoperative table does not apply to LPV and LNAV/VNAV. For inoperative MALSR, increase LNAV Cat A visibility to 1. When VGSI inoperative, Circling Rwy 3 NA at night. If local altimeter setting not received, procedure NA. DME/DME RNP- 0.3 NA. Baro-VNAV NA below -23°C (-9°F)

MALSR (A5)

MISSED APPROACH: Climb to 7000 direct ACITU and via 261° track to MIDGE and hold.

ASOS	DENVER CENTER	GILLETTE TOWER★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95

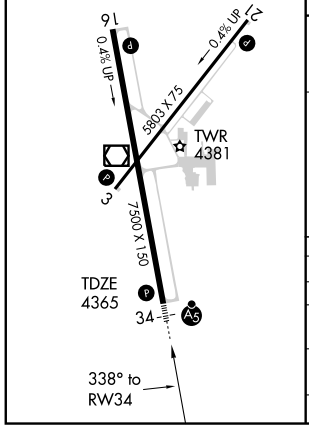


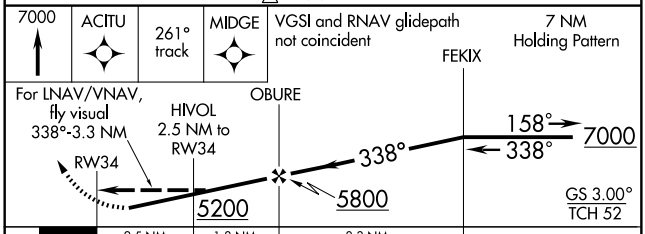
ELEV 4365 D

HIRL Rwy 16-34 L

REIL Rwys 3,16 and 21

MIRL Rwy 3-21 L





CATEGORY	A	B	C	D
LPV DA	4620-¾ 255 (300-¾)			
LNAV/VNAV DA	5480-2 1115 (1200-2)		5480-3 1115 (1200-3)	
LNAV MDA	5120-¾ 755 (800-¾)		5120-1¾ 755 (800-1¾)	5120-2 755 (800-2)
CIRCLING	5480-4 1115 (1200-4)			

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME GCC	APP CRS	Rwy Idg	7500
114.6	158°	TDZE	4337
Chan 93		Apt Elev	4365

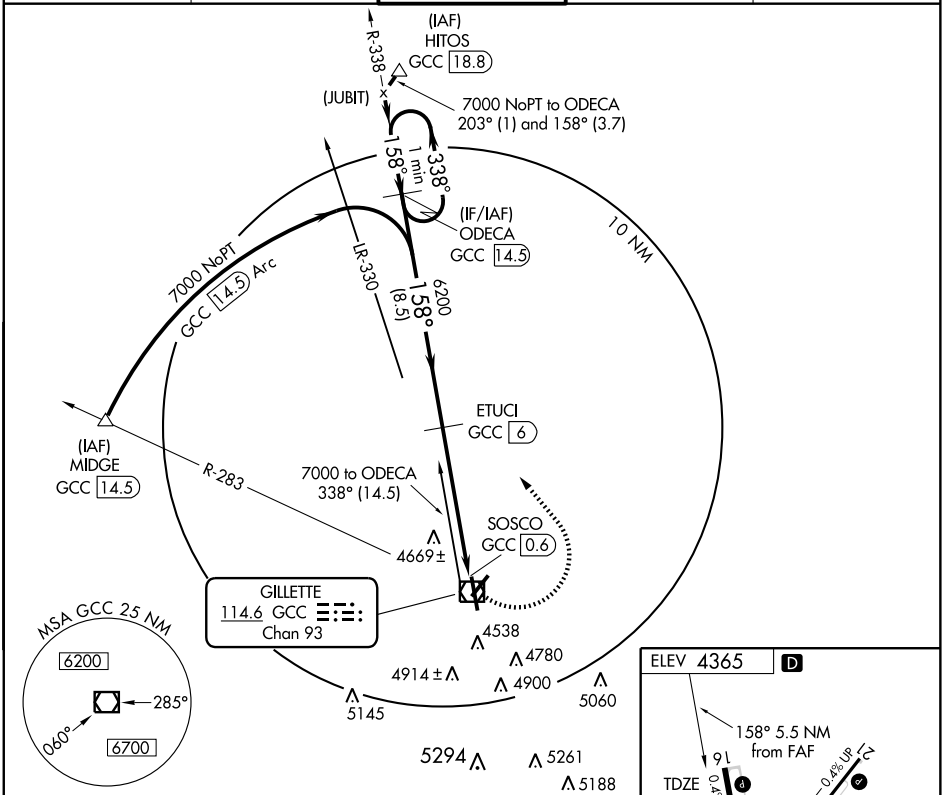
VOR/DME RWY 16

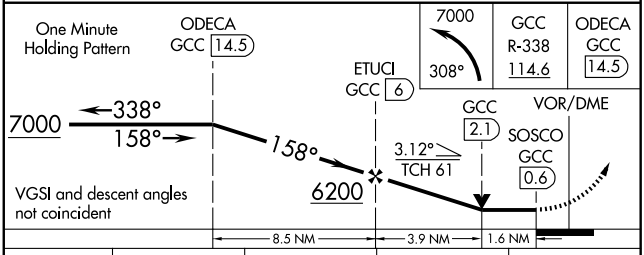
GILLETTE-CAMPBELL COUNTY (GCC)

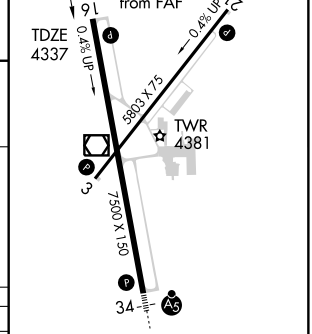
Visibility reduction by helicopters NA.
If local altimeter setting not received, procedure NA.
When VGSI inoperative, circling Rwy 3 NA at night.

MISSED APPROACH: Climbing left turn to 7000 via heading 308° and GCC R-338 to ODECA/14.5 DME and hold.

ASOS	DENVER CENTER	GILLETTE TOWER ★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95







CATEGORY	A	B	C	D
S-16	4920-1	583 (600-1)	4920-1½ 583 (600-1½)	4920-1¾ 583 (600-1¾)
CIRCLING	5040-1	675 (700-1)	5120-2¼ 755 (800-2¼)	5280-3 915 (1000-3)

HIRL Rwy 16-34 L
REIL Rwys 3, 16 and 21
MIRL Rwy 3-21 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME GCC	APP CRS	Rwy Idg	7500
114.6	334°	TDZE	4365
Chan 93		Apt Elev	4365

VOR/DME RWY 34

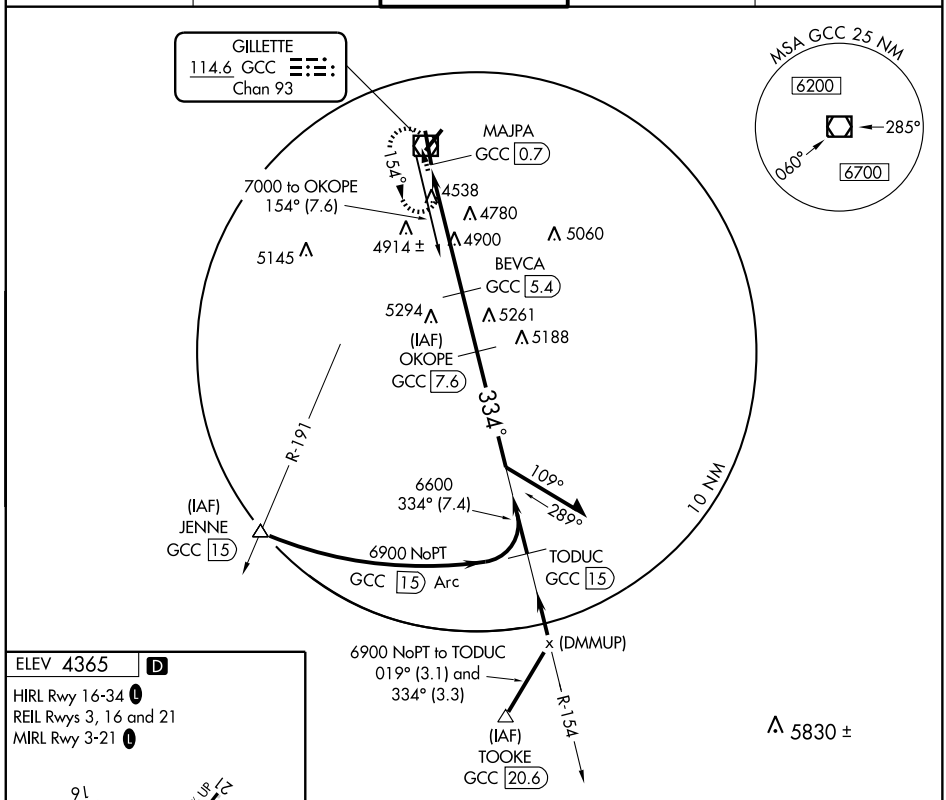
GILLETTE-CAMPBELL COUNTY (GCC)

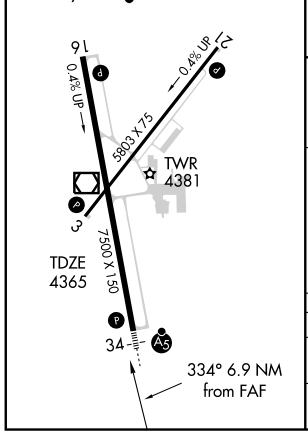
T For inoperative MALSR, increase S-34 Cat A visibility to 1.
A When VGSI inoperative, Circling Rwy 3 NA at night.
If local altimeter setting not received, procedure NA.

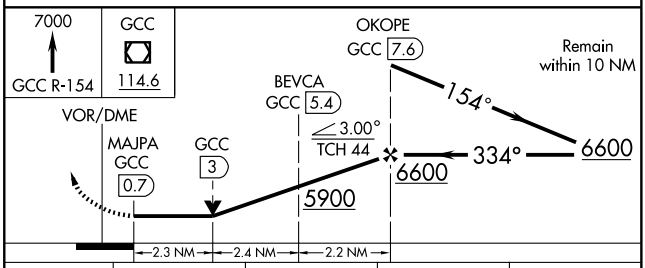
MALSR

MISSED APPROACH: Climb to 7000 via GCC VOR/DME R-154 to GCC VOR/DME and hold, continue climb-in-hold to 7000.

ASOS	DENVER CENTER	GILLETTE TOWER★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95







CATEGORY	A	B	C	D
S-34	5200-¾ 835 (900-¾)		5200-2 835 (900-2)	5200-2¼ 835 (900-2¼)
CIRCLING	5200-1 835 (900-1)	5200-1¼ 835 (900-1¼)	5200-2½ 835 (900-2½)	5280-3 915 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB GEY	APP CRS	Rwy Idg	6302
275	318°	TDZE	3913
		Apt Elev	3939

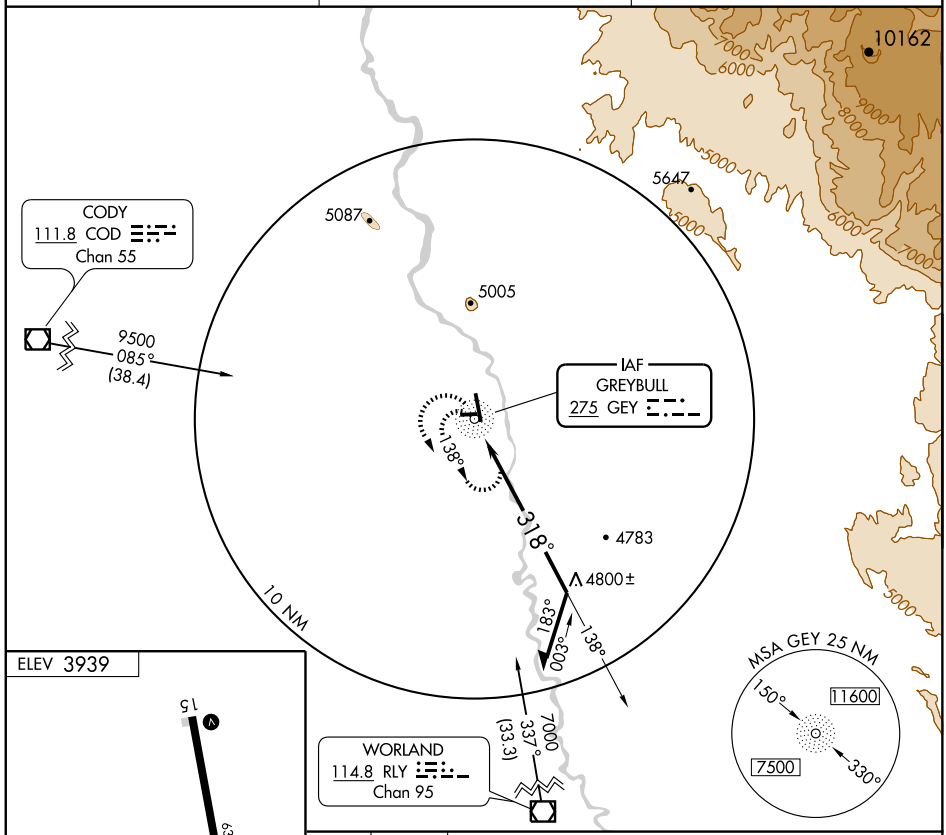
NDB RWY 33

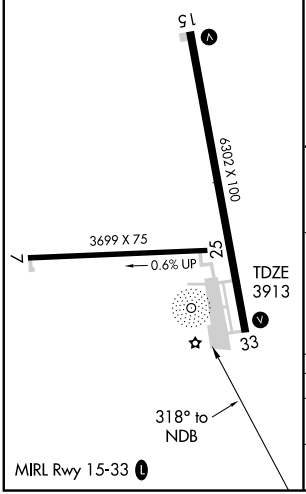
GREYBULL/SOUTH BIG HORN COUNTY (GEY)

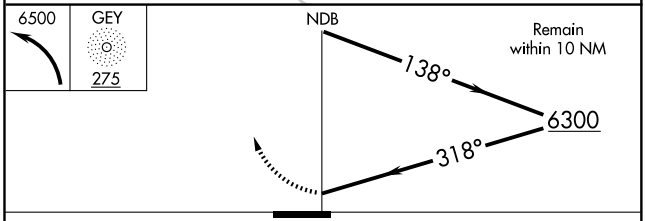
T NA If local altimeter setting not received, use Worland altimeter setting and increase all MDAs 120 feet. Visibility reduction by helicopter NA.

MISSED APPROACH: Climbing left turn to 6500 in GEY NDB holding pattern.

ASOS	SALT LAKE CENTER	CTAF
135.325	133.25 285.6	122.9 L







CATEGORY	A	B	C	D
S-33	5200-1¼ 1287 (1300-1¼)	5200-1½ 1287 (1300-1½)	5200-3	1287 (1300-3)
CIRCLING	5200-1¼ 1261 (1300-1¼)	5200-1½ 1261 (1300-1½)	5200-3	1261 (1300-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
073°	TDZE	N/A
	Apt Elev	3939

RNAV (GPS)-A

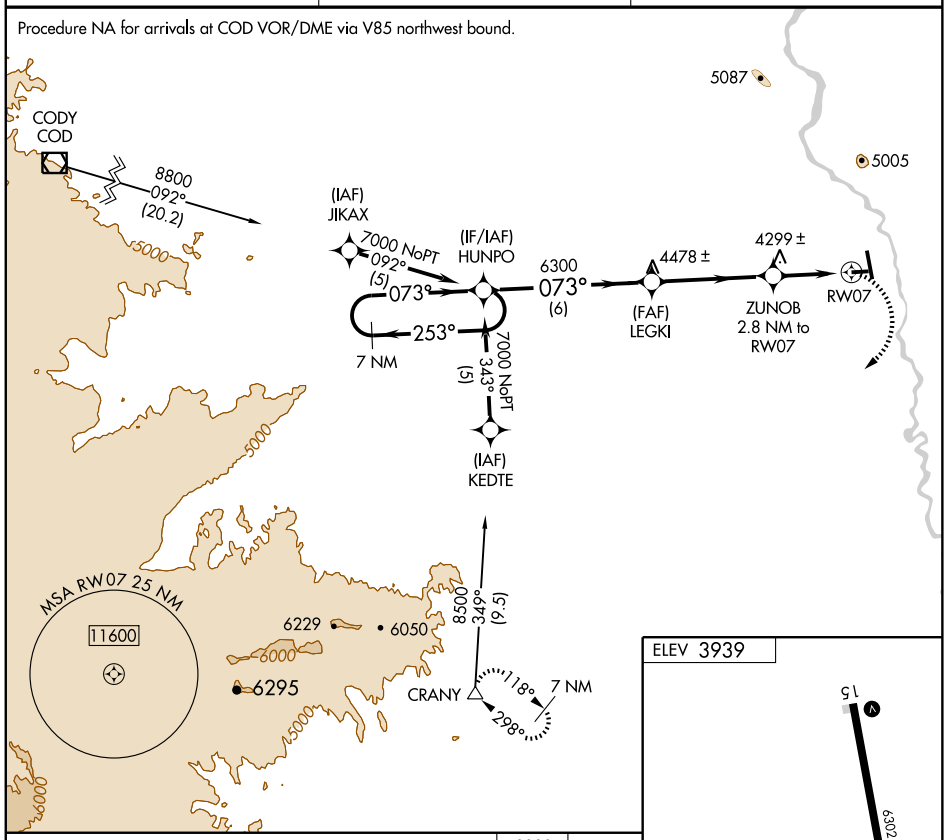
GREYBULL/ SOUTH BIG HORN COUNTY (GEY)

DME/DME RNP -0.3 NA.
If local altimeter setting not received, use Worland Muni altimeter setting and increase all MDAs 120 feet.
Circling to Rwy 7/25 NA at night.

MISSED APPROACH: Climbing right turn to 9000 direct CRANY and hold, continue climb-in-hold to 9000.

ASOS	SALT LAKE CENTER	CTAF
135.325	133.25 285.6	122.9 L

Procedure NA for arrivals at COD VOR/DME via V85 northwest bound.



CATEGORY	A	B	C	D
CIRCLING	4560-1 621 (700-1)	4580-1 641 (700-1)	NA	

MIRL Rwy 15-33 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS		
335°	Rwy Idg	6302
	TDZE	3913
	Apt Elev	3939

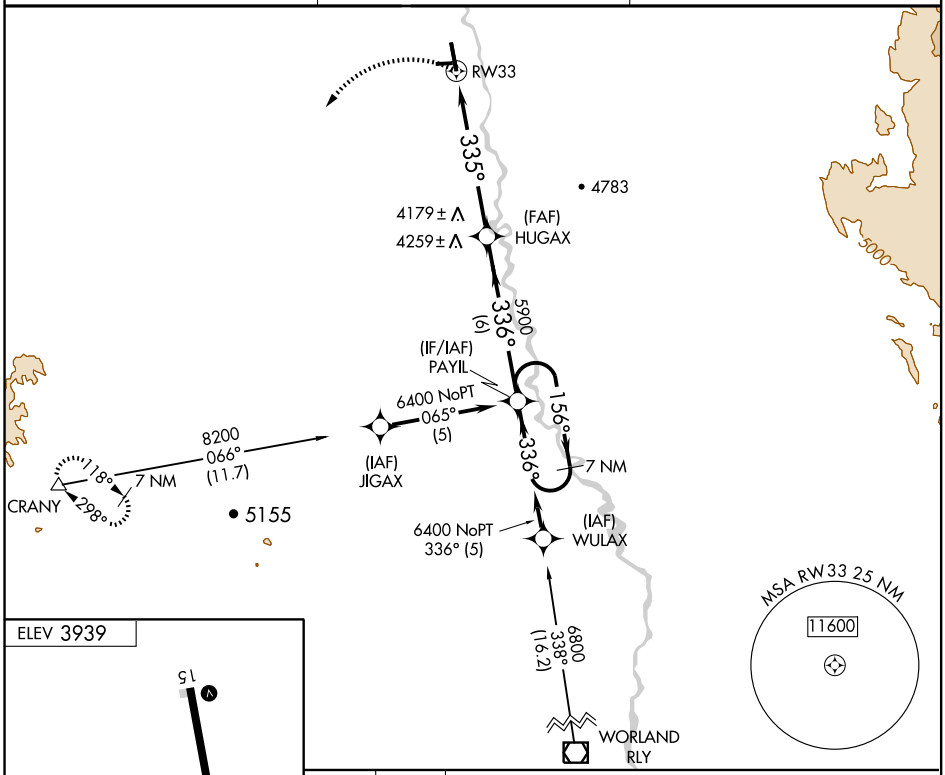
RNAV (GPS) RWY 33

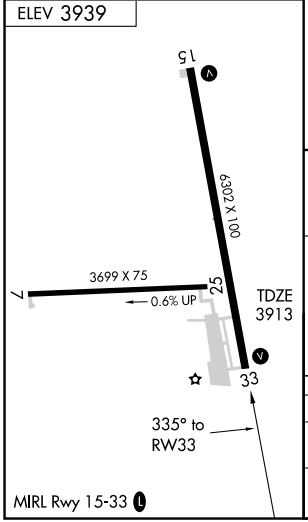
GREYBULL/ SOUTH BIG HORN COUNTY (GEY)

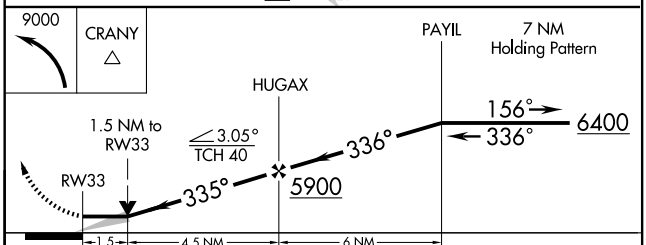
DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Worland Muni altimeter setting and increase all MDAs 120 feet.
VDP NA when using Worland altimeter setting.
Circling to Rwy 7/25 NA at night.

MISSED APPROACH: Climbing left turn to 9000 direct CRANY and hold, continue climb-in-hold to 9000.

ASOS	SALT LAKE CENTER	CTAF
135.325	133.25 285.6	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	4440-1 527 (600-1)		4440-1½ 527 (600-1½)	4440-1¾ 527 (600-1¾)
CIRCLING	4500-1 561 (600-1)	4580-1 641 (700-1)	4660-2 721 (800-2)	5040-3 1101 (1200-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	5510
321°	TDZE	4374
	Apt Elev	4400

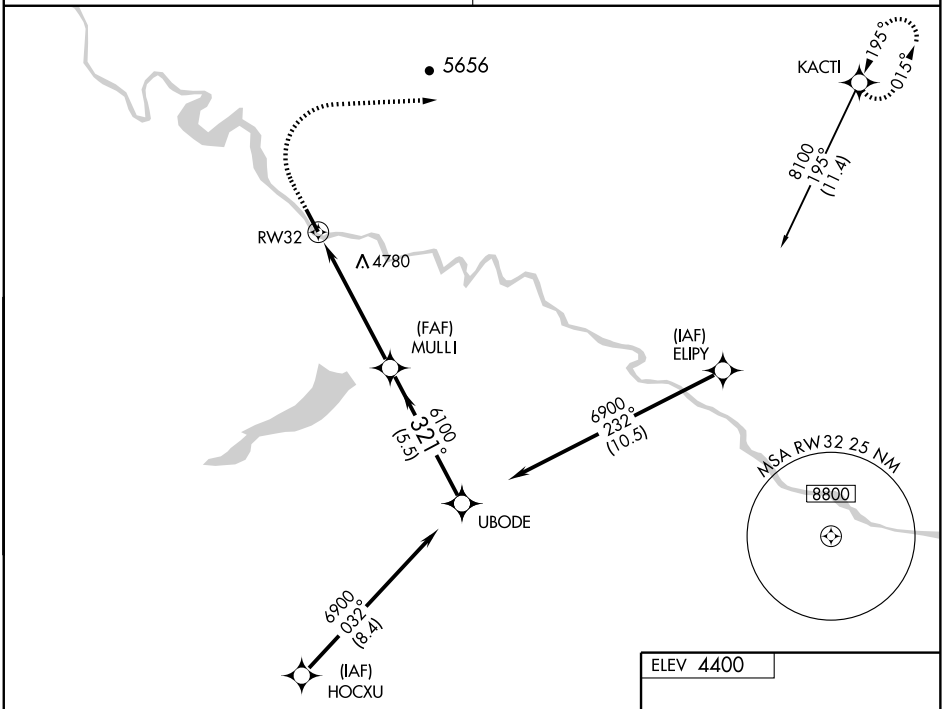
GPS RWY 32

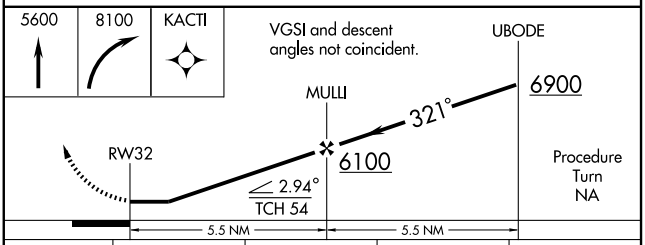
GUERNSEY/CAMP GUERNSEY (7V6)

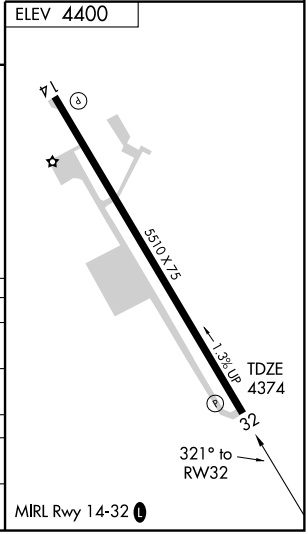
T NA — Obtain local altimeter setting on UNICOM, when not received use Scottsbluff, NE altimeter setting. Descent angle NA when using Scottsbluff altimeter setting.

MISSED APPROACH: Climb to 5600 then climbing right turn to 8100 direct KACTI WP and hold.

DENVER CENTER	UNICOM
135.6 363.025	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-32	5040-1 666 (700-1)		5040-1¾ 666 (700-1¾)	5040-2 666 (700-2)
CIRCLING	5340-1¼ 940 (1000-1¼)	5340-1½ 940 (1000-1½)	5420-3 1020 (1100-3)	
SCOTTSBLUFF, NE ALTIMETER SETTING MINIMUMS				
S-32	5240-1 866 (900-1)		5240-2¾ 866 (900-2¾)	
CIRCLING	5540-1¼ 1140 (1200-1¼)	5540-1½ 1140 (1200-1½)	5620-3 1220 (1300-3)	

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB GYZ 280	APP CRS 321°	Rwy Idg 5510 TDZE 4374 Apt Elev 4400

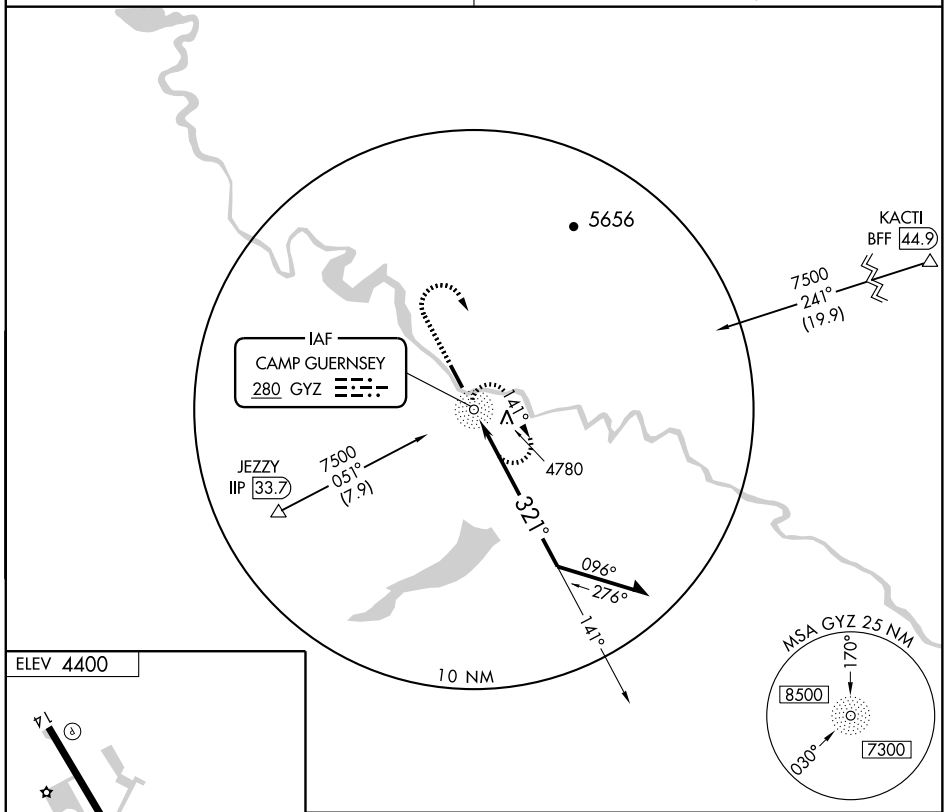
NDB RWY 32

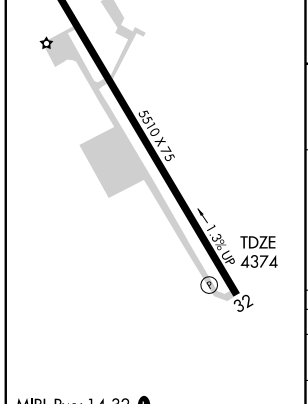
GUERNSEY/CAMP GUERNSEY (7V6)

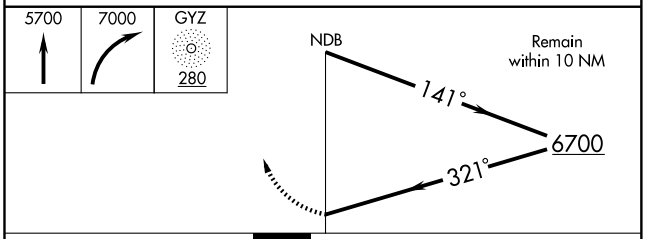
T ANA — When control tower closed obtain local altimeter setting on UNICOM, when not received use Scottsbluff, NE altimeter setting and increase all MDAs 200 feet and increase CATs B and C visibilities ¼mile.

MISSED APPROACH: Climb to 5700 then climbing right turn to 7000 direct GYZ NDB and hold.

DENVER CENTER	UNICOM
135.6 363.025	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-32	5280-1¼ 906 (900-1¼)		5280-2¾ 906 (900-2¾)	5280-3 906 (900-3)
CIRCLING	5340-1¼ 940 (1000-1¼)	5340-1½ 940 (1000-1½)	5420-3 1020 (1100-3)	

MIRL Rwy 14-32 L

NW-1, 14 JAN 2010 to 11 FEB 2010

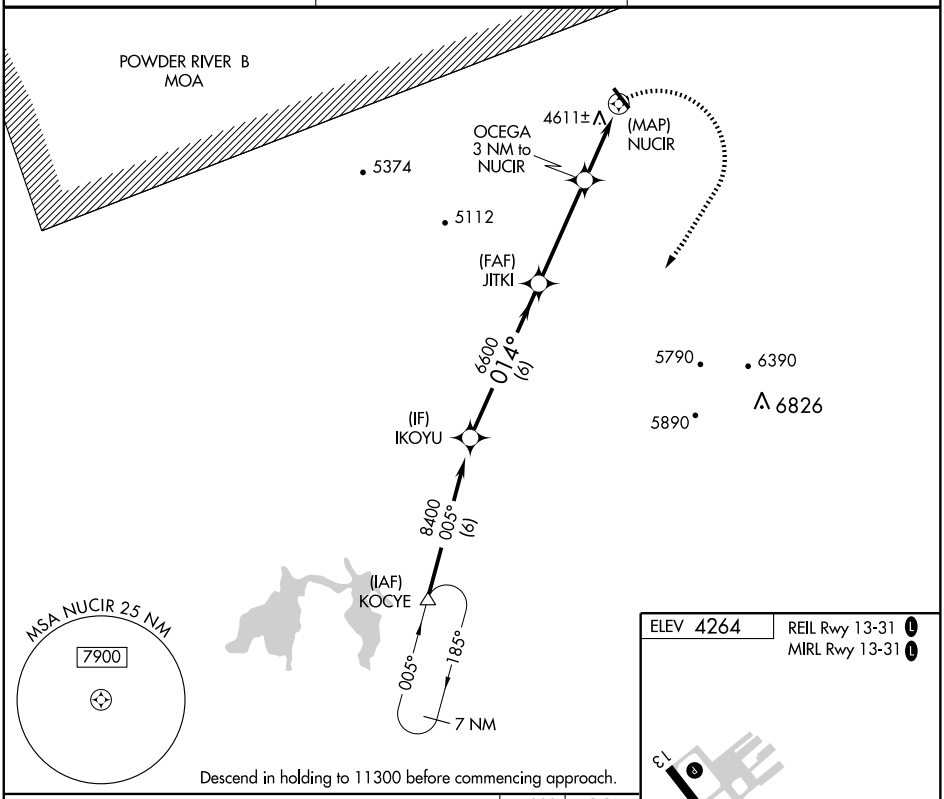
APP CRS	Rwy Idg	N/A
014°	TDZE	N/A
	Apt Elev	4264

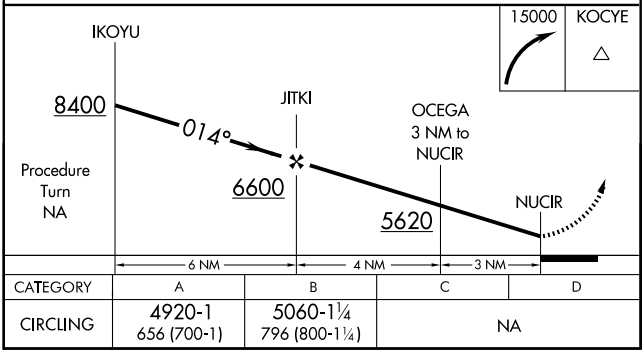
RNAV (GPS)-A
HULETT MUNI (W43)

Procedure NA at night.
NA DME/DME RNP -0.3 NA.
If local altimeter setting not received, use Gillette altimeter setting and increase all MDAs 120 feet.

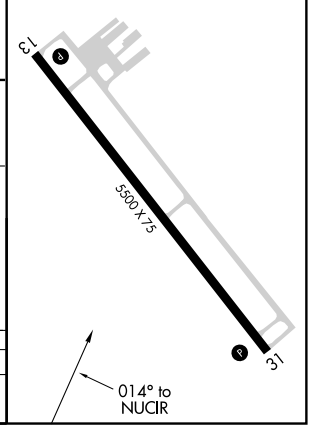
MISSED APPROACH: Climbing right turn to 15000 direct KOCYE and hold, continue climb-in-hold to 15000.

AWOS-3	DENVER CENTER	UNICOM
128.755	127.95 338.2	122.8 (CTAF) L





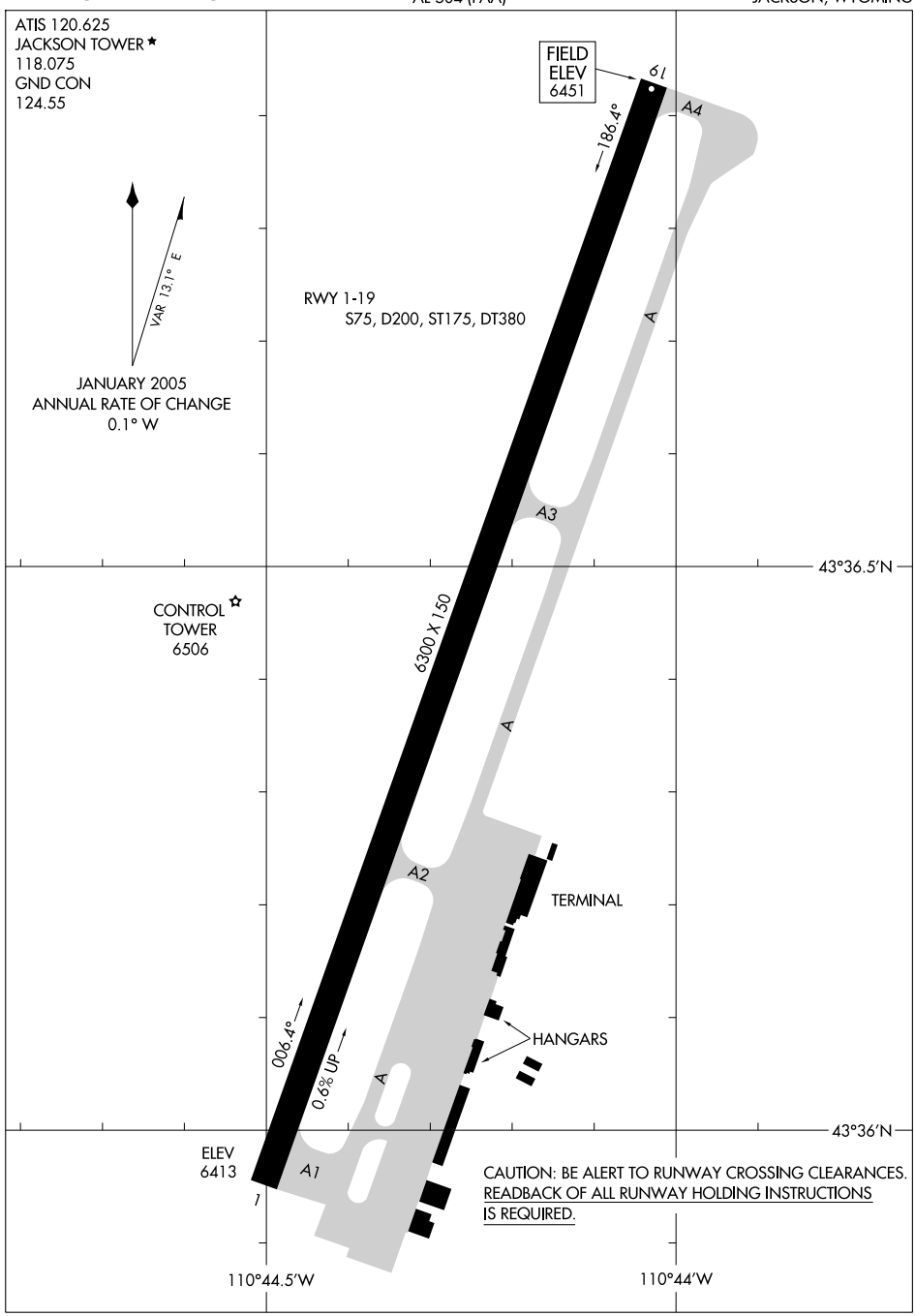
CATEGORY	A	B	C	D
CIRCLING	4920-1 656 (700-1)	5060-1¼ 796 (800-1¼)	NA	



AIRPORT DIAGRAM

AL-504 (FAA)

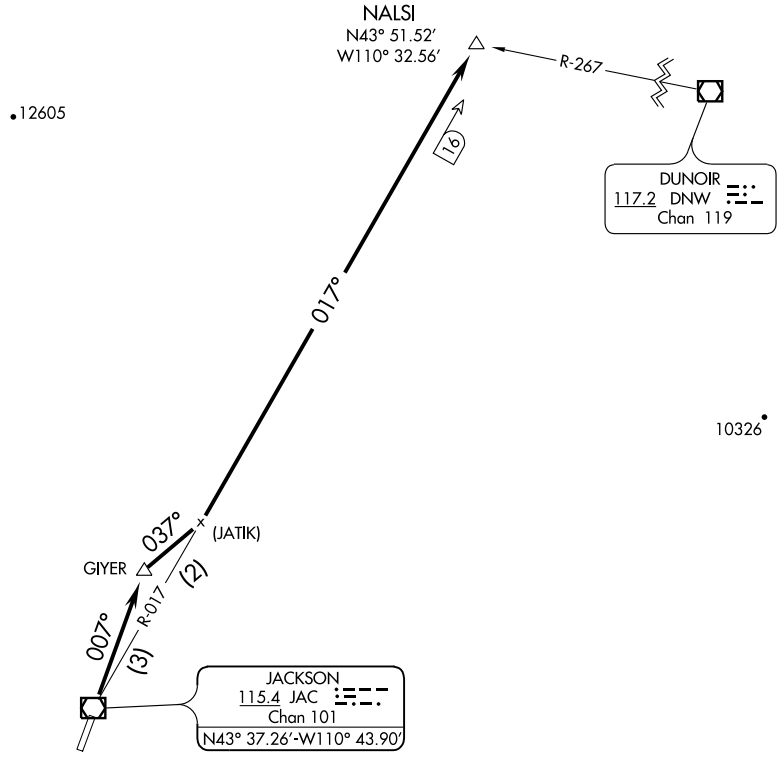
JACKSON HOLE (JAC)
JACKSON, WYOMING



NW-1, 14 JAN 2010 to 11 FEB 2010

GEYSER FOUR DEPARTURE (OBSTACLE)

SALT LAKE CENTER
133.25 285.6
CASPER RADIO
122.05
CTAF
118.075
UNICOM
122.95
AWOS-3 120.625



TAKE-OFF MINIMUMS

Rwy 1: Standard with minimum climb of 450′ per NM to 14000, or 4400-3 for climb in visual conditions.

Rwy 19: Not authorized - ATC.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1: Climb to 14000′ via JAC R-007 to GIYER/JAC 3 DME, then right turn heading 037° to intercept JAC R-017 to NALSI INT/JAC 16 DME; or for climb visual conditions: Cross JAC VOR/DME northbound at or above 10800 then climb to 14000 via JAC R-017 to NALSI INT/JAC 16 DME.

LOC/DME I-JAC	APP CRS	Rwy Idg	6300
109.1	187°	TDZE	6451
Chan 28		Apt Elev	6451

ILS or LOC Y RWY 19

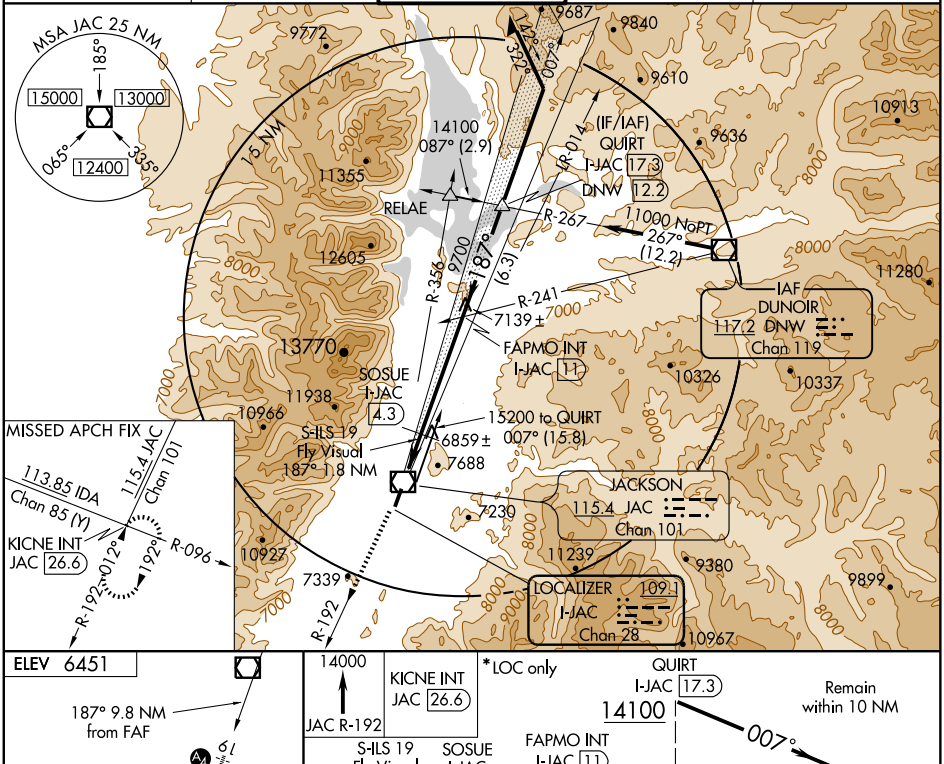
JACKSON HOLE (JAC)

T NA — Inoperative table does not apply. Circling NA east of Rwy 1-19.

MALS

MISSED APPROACH: Climb to 14000 via JAC VOR/DME R-192 to KICNE INT/JAC VOR/DME 26.6 DME and hold, continue climb-in-hold to 14000.

ATIS	SALT LAKE CENTER	JACKSON TOWER*	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



CATEGORY	A	B	C	D
S-ILS 19	7063-2 612 (700-2)			
S-LOC 19	7500-1¼ 1049 (1100-1¼)	7500-1½ 1049 (1100-1½)	7500-3 1049 (1100-3)	
CIRCLING	7500-1¼ 1049 (1100-1¼)	7500-1½ 1049 (1100-1½)	7500-3 1049 (1100-3)	
SOSUE FIX MINIMUMS				
S-LOC 19	7300-1 849 (900-1)	7300-1¼ 849 (900-1¼)	7300-2½ 849 (900-2½)	7300-2¾ 849 (900-2¾)
CIRCLING	7300-1 849 (900-1)	7300-1¼ 849 (900-1¼)	7300-2½ 849 (900-2½)	7300-2¾ 849 (900-2¾)

FAF to MAP 9.8 NM					
Knots	60	90	120	150	180
Min:Sec	9:48	6:32	4:54	3:55	3:16

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-JAC	APP CRS	Rwy Idg	6300
109.1	187°	TDZE	6451
Chan 28		Apt Elev	6451

ILS or LOC Z RWY 19

JACKSON HOLE (JAC)

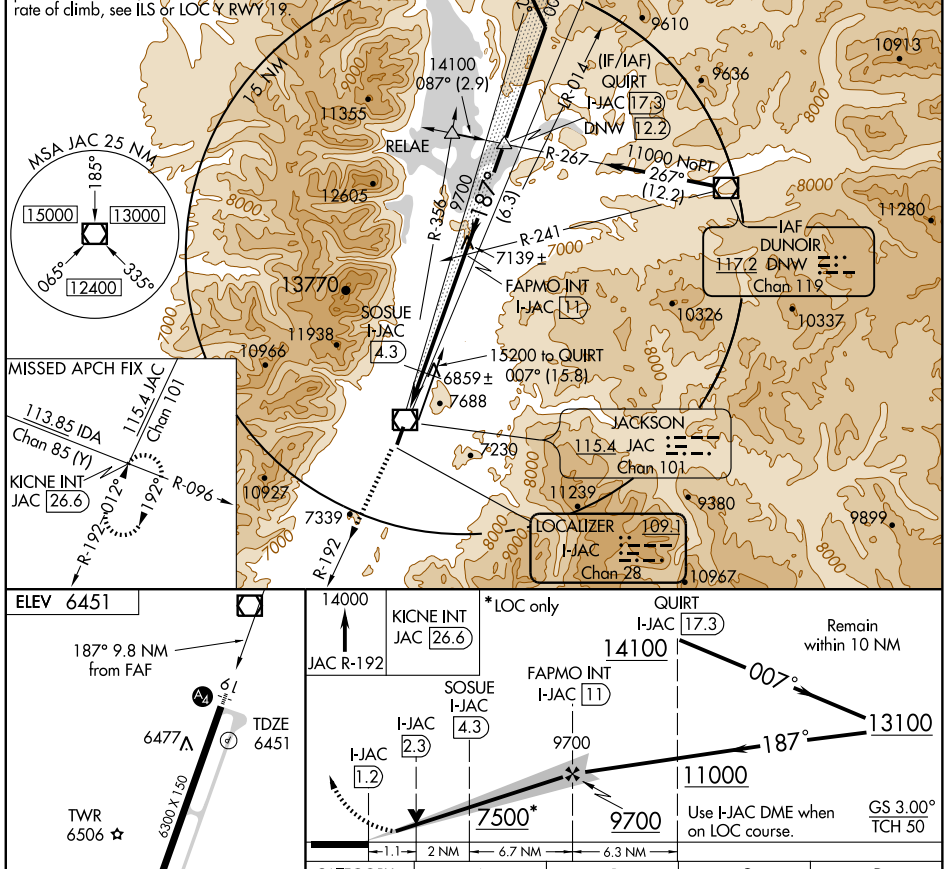
T NA — Inoperative table does not apply to S-LOC 19. Circling NA east of Rwy 1-19.

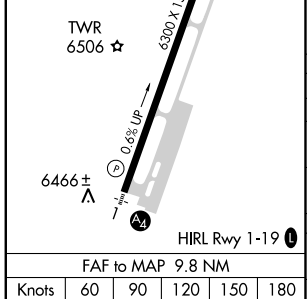
MALS

MISSED APPROACH: Climb to 14000 via JAC VOR/DME R-192 to KICNE INT/JAC VOR/DME 26.6 DME and hold, continue climb-in-hold to 14000.

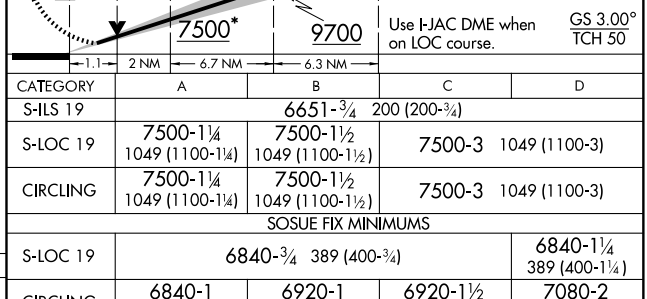
ATIS	SALT LAKE CENTER	JACKSON TOWER*	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95

Missed approach obstructions require a minimum climb gradient of 245 feet per NM to 11200; if unable to meet rate of climb, see ILS or LOC Y RWY 19.





FAF to MAP 9.8 NM					
Knots	60	90	120	150	180
Min:Sec	9:48	6:32	4:54	3:55	3:16



CATEGORY	A	B	C	D
S-ILS 19	6651-¾ 200 (200-¾)			
S-LOC 19	7500-1¼ 1049 (1100-1¼)	7500-1½ 1049 (1100-1½)	7500-3 1049 (1100-3)	
CIRCLING	7500-1¼ 1049 (1100-1¼)	7500-1½ 1049 (1100-1½)	7500-3 1049 (1100-3)	
SOSUE FIX MINIMUMS				
S-LOC 19	6840-¾ 389 (400-¾)			6840-1¼ 389 (400-1¼)
CIRCLING	6840-1 389 (400-1)	6920-1 469 (500-1)	6920-1½ 469 (500-1½)	7080-2 629 (700-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 58299 W01A	APP CRS 006°	Rwy Idg 6300 TDZE 6431 Apt Elev 6451

RNAV (GPS) X RWY 1

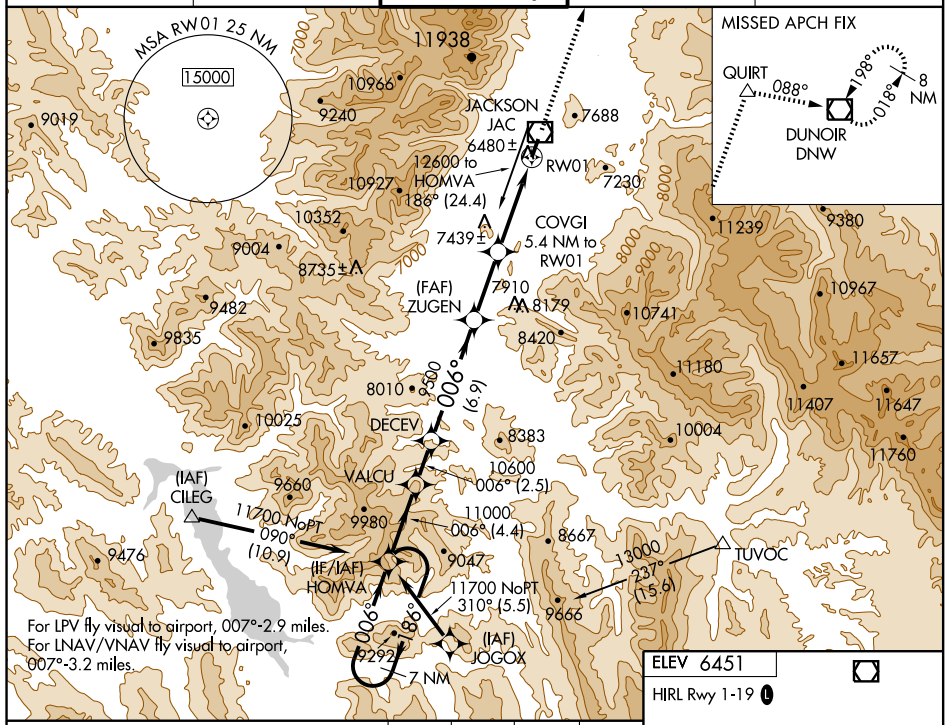
JACKSON HOLE (JAC)

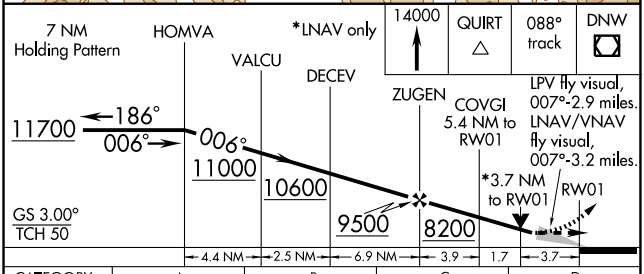
Circling NA east of Rwy 1-19. Inoperative table does not apply. If local altimeter setting not received, procedure NA. Baro-VNAV NA below -27°C (-16°F). DME/DME RNP- 0.3 NA.

MALS

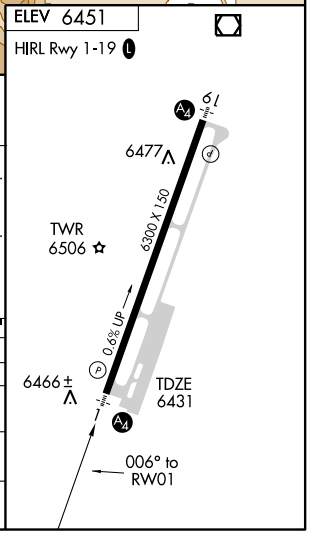
MISSED APPROACH: Climb to 14000 direct QUIRT and via 088° track to DNW VOR/DME and hold, continue climb-in-hold to 14000.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95





CATEGORY	A	B	C	D
LPV DA	7393-2 962 (1000-2)			
LNAV/VNAV DA	7470-2 1039 (1100-2)		7470-3 1039 (1100-3)	
LNAV MDA	7640-1¼ 1209 (1200-1¼)	7640-1½ 1209 (1200-1½)	7640-3 1209 (1200-3)	
CIRCLING	7640-1¼ 1189 (1200-1¼)	7640-1½ 1189 (1200-1½)	7640-3 1189 (1200-3)	



NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6300
187°	TDZE	6451
	Apt Elev	6451

RNAV (GPS) Y RWY 19

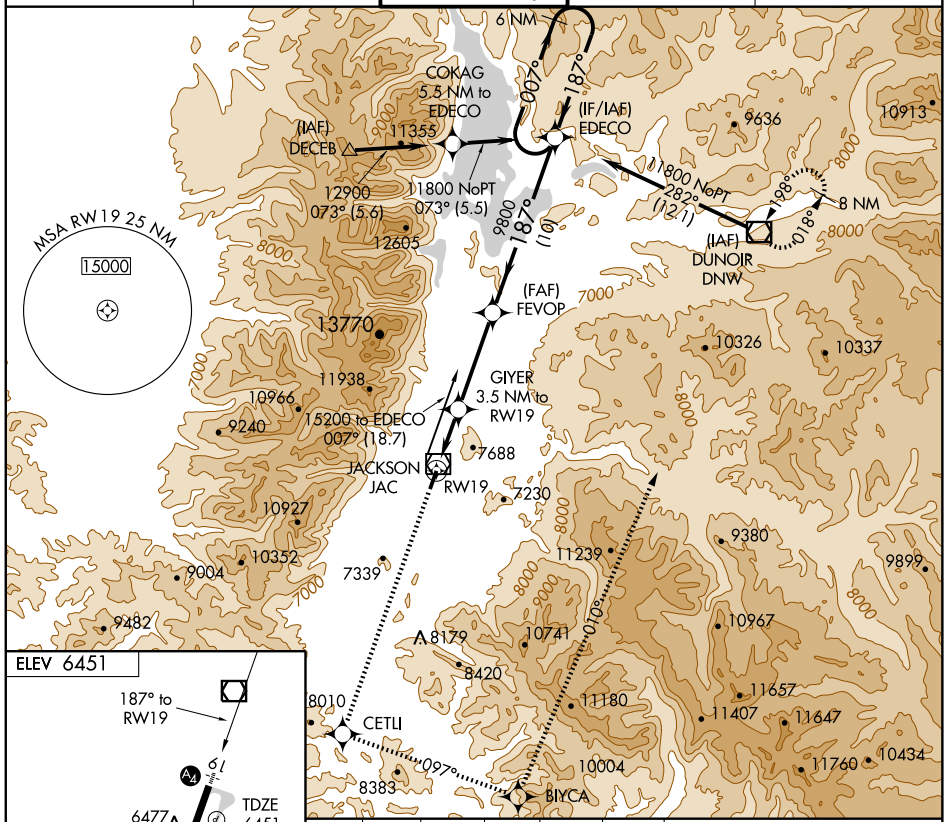
JACKSON HOLE (JAC)

Circling NA east of Rwy 1-19. DME/DME RNP- 0.3 NA. Inoperative table does not apply. If local altimeter setting not received, procedure NA.

MALS

MISSED APPROACH: Climb to 14000 direct CETLI and left turn via 097° track to BIYCA and left turn via 010° track to DNW VOR/DME and hold.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



CATEGORY	A	B	C	D
LNAV MDA	7640-1¼ 1189 (1200-1¼)	7640-1½ 1189 (1200-1½)	7640-3 1189 (1200-3)	
CIRCLING	7640-1¼ 1189 (1200-1¼)	7640-1½ 1189 (1200-1½)	7640-3 1189 (1200-3)	

HIRL Rwy 1-19 L

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (RNP) Y RWY 1

JACKSON HOLE (JAC)

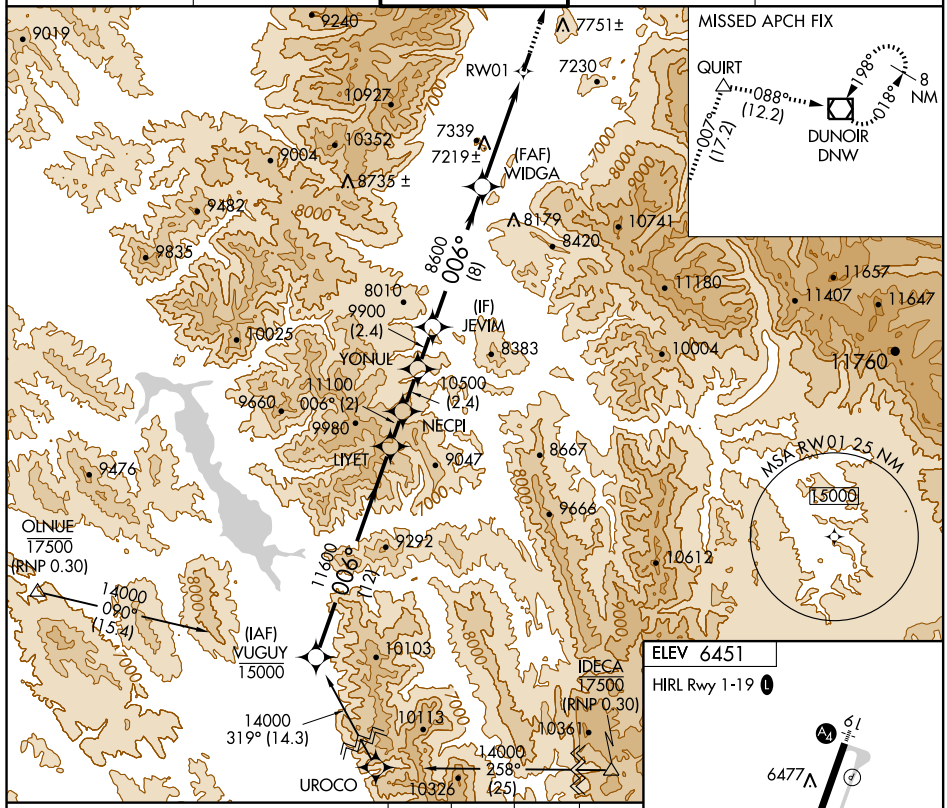
APP CRS	Rwy Idg	6300
006°	TDZE	6431
	Apt Elev	6451

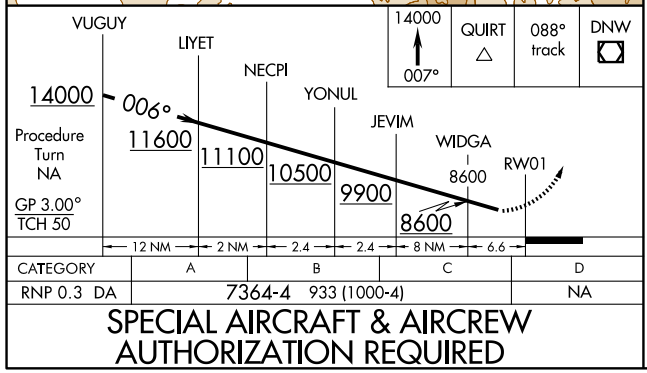
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -28°C (-18°F) or above 36°C (97°F). Inoperative table does not apply. Visibility reduction by helicopters NA. When VGSI inoperative, procedure NA at night.

MALS

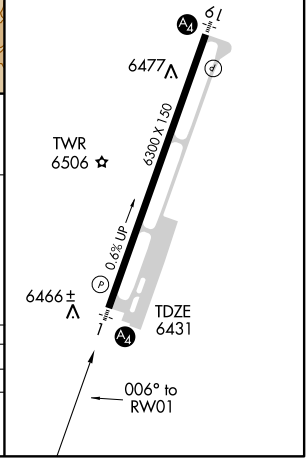
MISSED APPROACH: Climb to 14000 via track 007° to QUIRT and via track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95





SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED



NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6300
006°	TDZE	6431
	Apt Elev	6451

RNAV (RNP) Z RWY 1

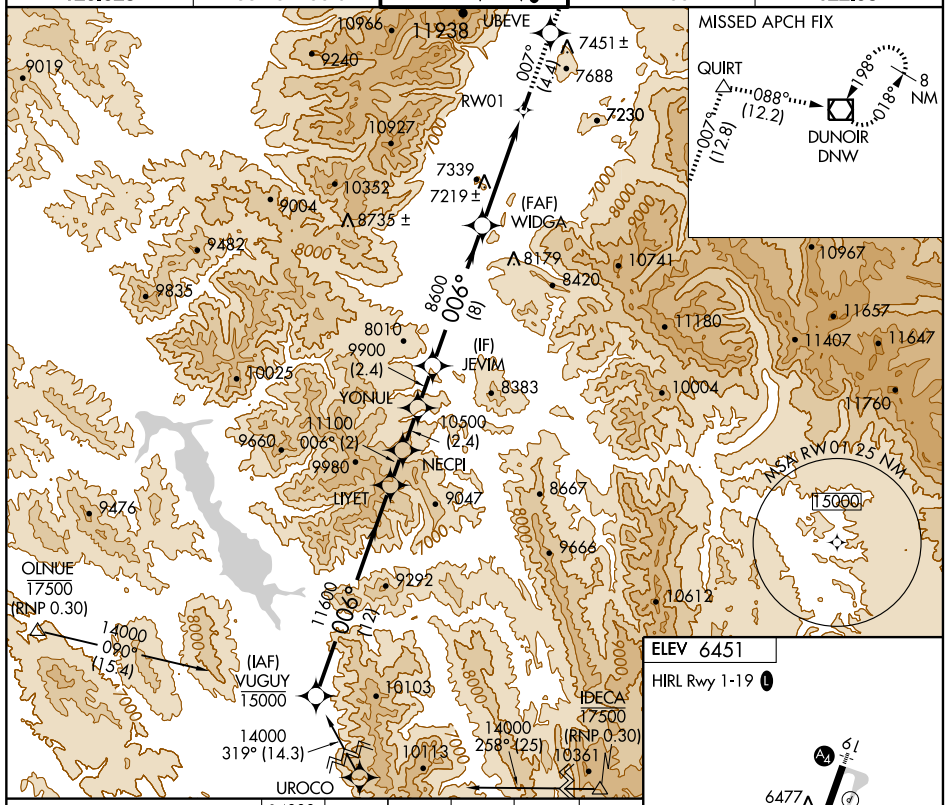
JACKSON HOLE (JAC)

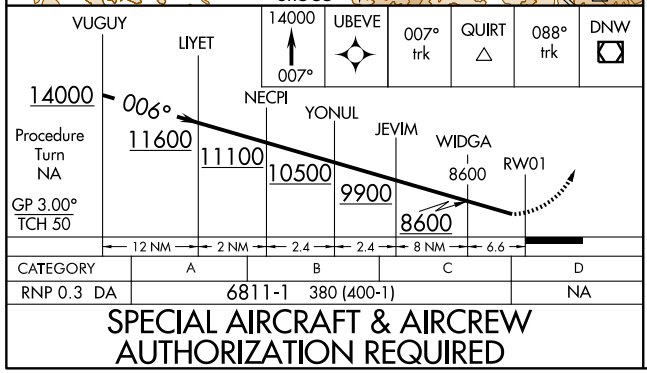
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -28°C (-18°F) or above 36°C (97°F). For inoperative MALS, increase RNP 0.30 visibility all cats to 1½. Visibility reduction by helicopters NA. When VGSI inoperative, procedure NA at night. Missed approach requires RNP less than 1.0 and minimum climb of 280 feet per NM to 8100; if unable, see RNAV (RNP) Y RWY 1.

MALS

MISSED APPROACH: Climb to 14000 via track 007° to UBEVE and via track 007° to QUIRT and via track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95

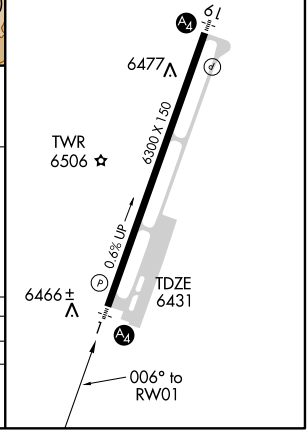




SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

ELEV 6451

HIRL Rwy 1-19 L



NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	6300
187°	TDZE	6451
	Apt Elev	6451

RNAV (RNP) Z RWY 19

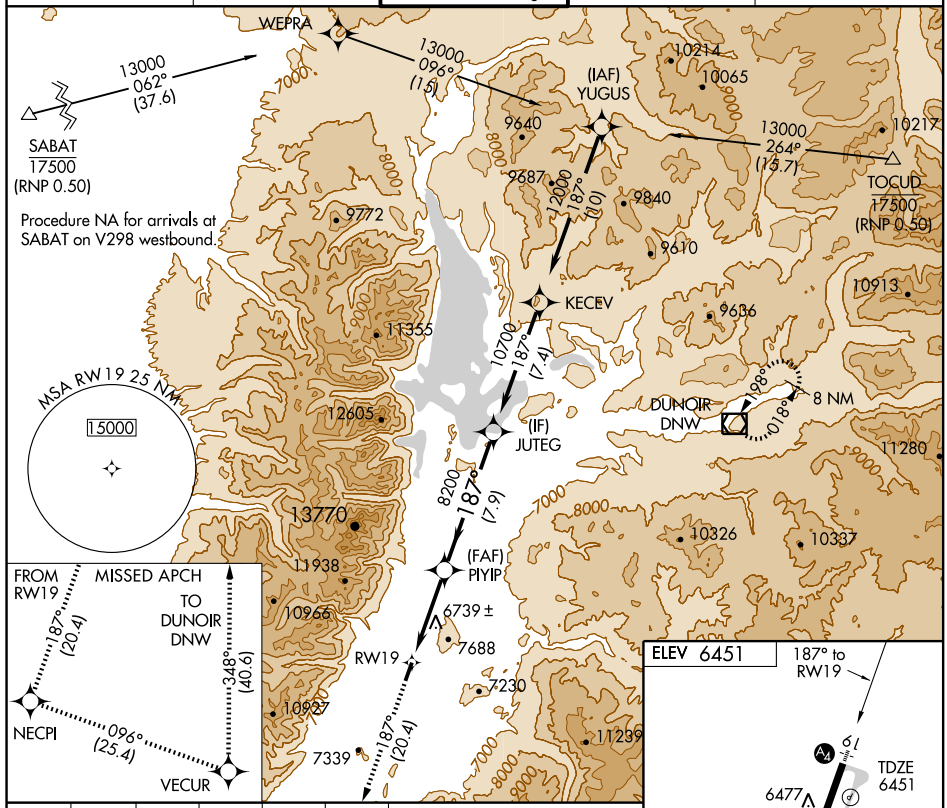
JACKSON HOLE (JAC)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -28°C (-18°F) or above 35°C (96°F). For inoperative MALS, increase RNP 0.30 all cats visibility to 1½. Visibility reduction by helicopters NA. When VGSI inoperative, procedure NA at night.

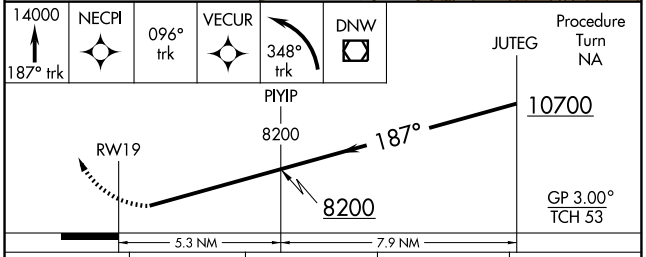
MALS

MISSED APPROACH: Climb to 14000 via track 187° to NECPI and via track 096° to VECUR and via left turn on track 348° to DNW VOR/DME and hold.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95

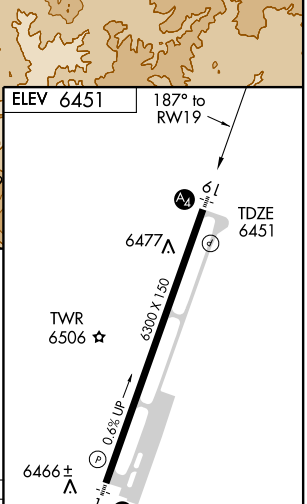


14000	NECPI	096°	VECUR	348°	DNW
187° trk		trk		trk	



CATEGORY	A	B	C	D
RNP 0.3 DA	6856-1¼	405 (500-1¼)		NA

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

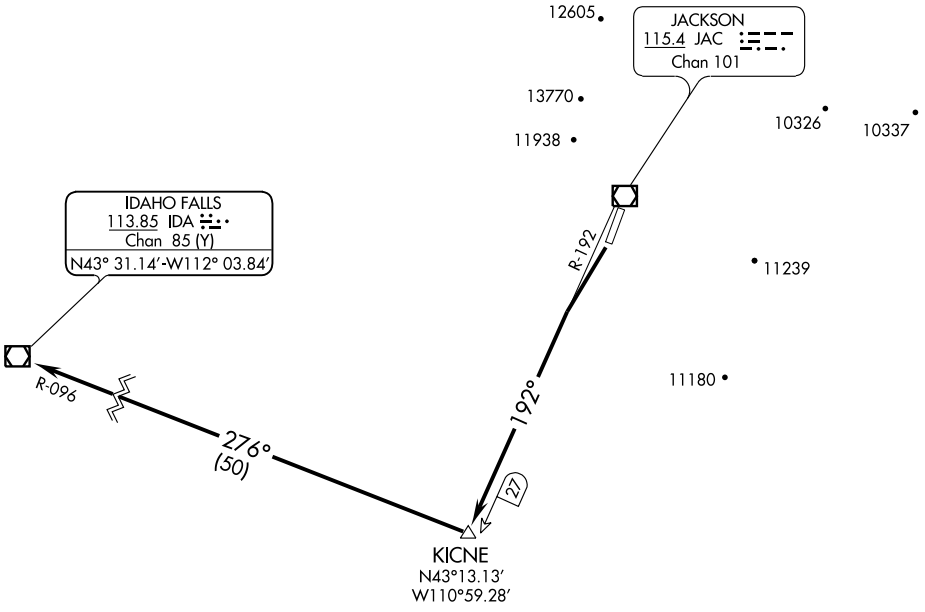


HIRL Rwy 1-19 L

NW-1. 14 JAN 2010 to 11 FEB 2010

TETON THREE DEPARTURE (OBSTACLE)

SALT LAKE CENTER
133.25 285.6
CASPER RADIO
122.05
CTAF
118.075
UNICOM
122.95
AWOS-3 120.625



TAKE-OFF MINIMUMS:
Rwy 19: Standard with minimum climb of 335' per NM to 14000 or 4400-3 for climb in visual conditions.
Rwy 1: Not authorized - ATC.

NOTE: Rwy 19, Bush 485 feet from departure end of runway, 513 feet right of centerline, 6428' MSL.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19: Climb to 14000 via JAC R-192 to KICNE INT/JAC 27 DME, then right turn via IDA R-096 to IDA VOR/DME; or for climb in visual conditions: cross JAC VOR/DME southbound at or above 10800, then climb to 14000 via JAC R-192 to KICNE INT/JAC 27 DME, then right turn via IDA R-096 to IDA VOR/DME.

VOR/DME JAC	APP CRS	Rwy Idg	6300
115.4	008°	TDZE	6431
Chan 101		Apt Elev	6451

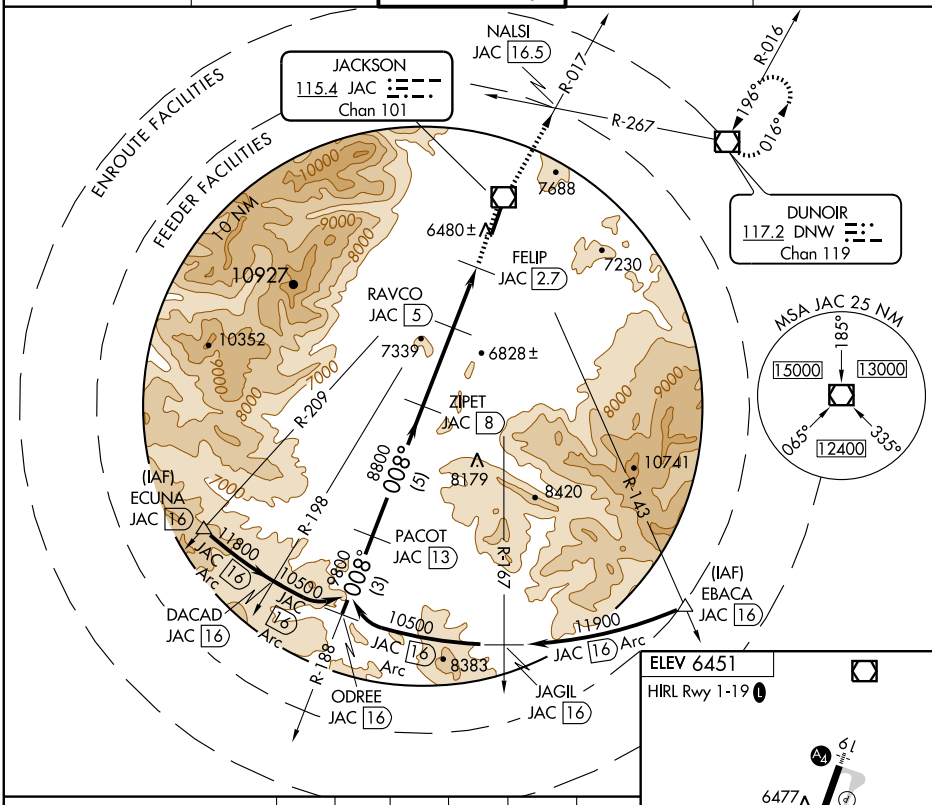
VOR/DME RWY 1
JACKSON HOLE (JAC)

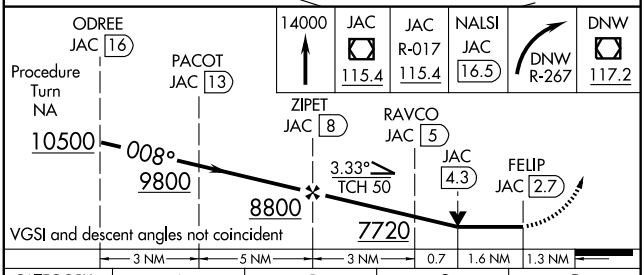
Circling NA east of Rwy 1-19.
Inoperative table does not apply.
If local altimeter setting not received, procedure NA.

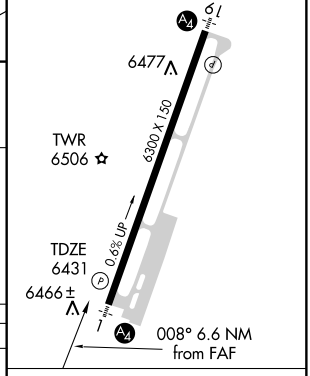
MALS

MISSED APPROACH: Climb to 14000 direct JAC VOR/DME, and via JAC R-017 to NALSI Int/JAC 16.5 DME, and right turn via DNW R-267 to DNW VOR/DME and hold.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95







CATEGORY	A	B	C	D
S-1	7380-1½ 949 (1000-1½)		7380-2¾ 949 (1000-2¾)	7380-3 949 (1000-3)
CIRCLING	7380-1½ 929 (1000-1½)		7380-2¾ 929 (1000-2¾)	7380-3 929 (1000-3)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME JAC	APP CRS	Rwy Idg	6300
115.4	193°	TDZE	6451
Chan 101		Apt Elev	6451

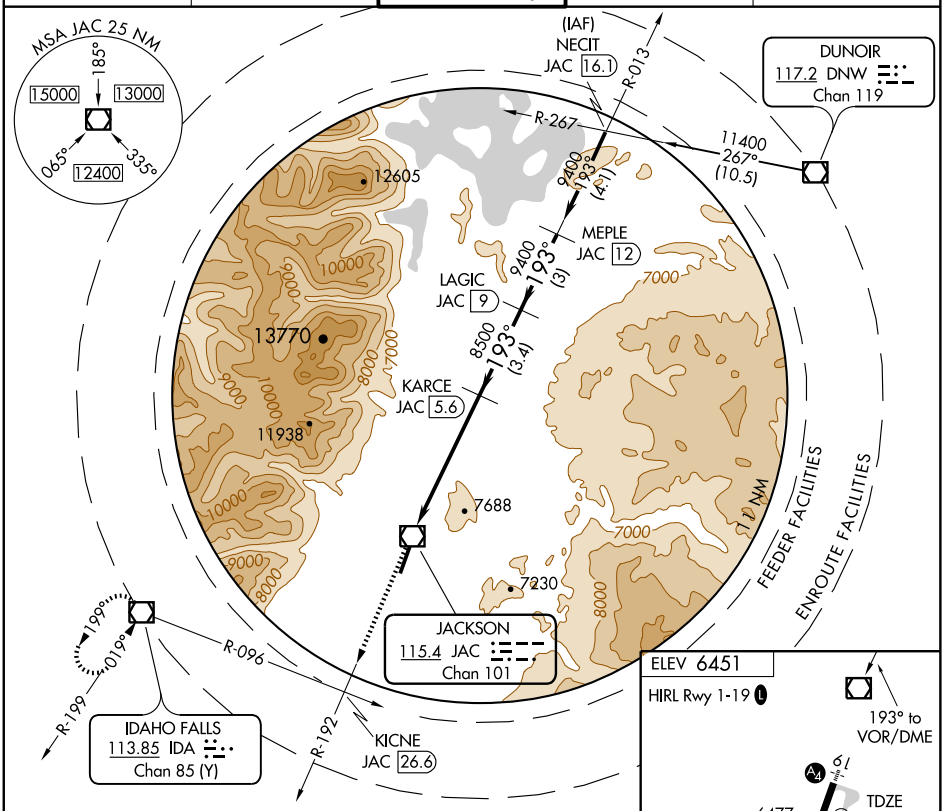
VOR/DME RWY 19
JACKSON HOLE (JAC)

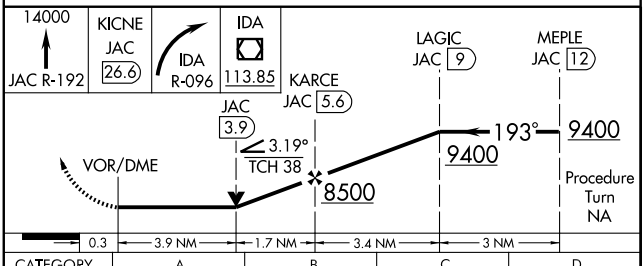
T Circling NA east of Rwy 1-19.
A Inoperative table does not apply.
If local altimeter setting not received, procedure NA.

MALS

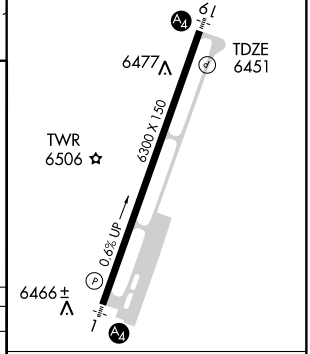
MISSED APPROACH: Climb to 14000 via JAC R-192 to KICNE INT/JAC 26.6 DME, and right turn via IDA R-096 to IDA VOR/DME and hold.

ATIS	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95





CATEGORY	A	B	C	D
S-19	7840-1¼ 1389 (1400-1¼)	7840-1½ 1389 (1400-1½)	7840-3 1389 (1400-3)	
CIRCLING	7840-1¼ 1389 (1400-1¼)	7840-1½ 1389 (1400-1½)	7840-3 1389 (1400-3)	

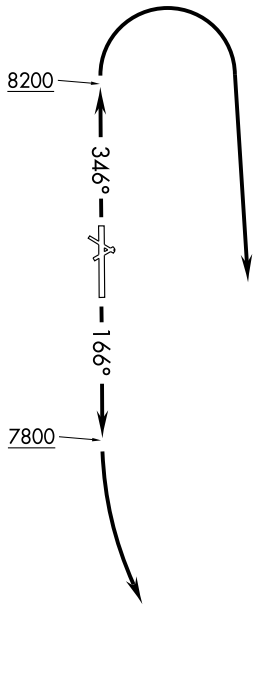


Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

KEMRR TWO DEPARTURE (RNAV)

SALT LAKE CITY CENTER
124.35 353.5
SALT LAKE CITY DEP CON
124.3 322.3



TAKE-OFF MINIMUMS
Rwy 4, 10, 22, 28: NA - Rwy Surfaces.
Rwy 16, 34: Standard.

NOTE: 1. GPS Required.
2. RNAV 1.

NOTE: Chart not to scale.

FORT BRIDGER
FBR

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16: Climb to 7800 via heading 166° then climbing left turn to 12000 (or assigned altitude) . . .
TAKE-OFF RUNWAY 34: Climb to 8200 via heading 346° then climbing right turn to 12000 (or assigned altitude) . . .
. . . direct FBR VOR/DME then via assigned route/fix.

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	8208
166°	TDZE	7285
	Apt Elev	7285

RNAV (GPS) RWY 16

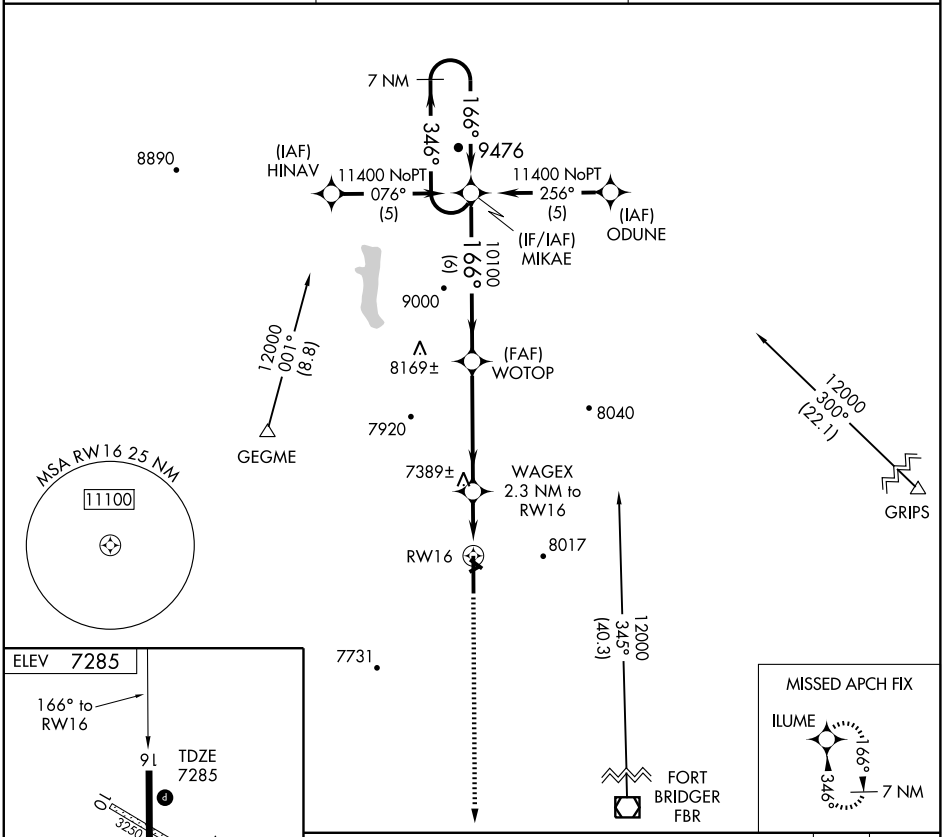
KEMMERER MUNI (EMM)

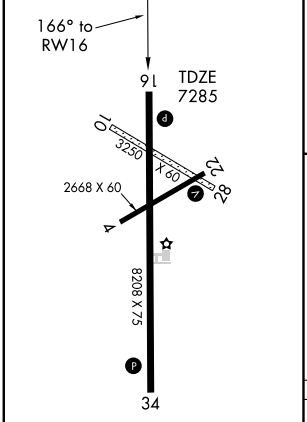
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Evanston altimeter setting and increase all MDA 120 feet.

NA

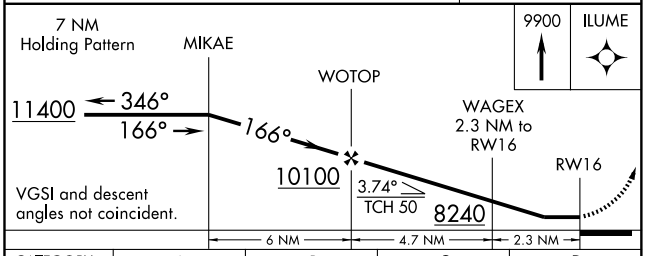
MISSED APPROACH: Climb to 9900 direct ILUME and hold.

AWOS-3	SALT LAKE CITY CENTER	UNICOM
119.675	124.35 353.5	122.8 (CTAF) L





REIL Rwys 16 and 34 L
MIRL Rwys 16-34 and 4-22 L



CATEGORY	A	B	C	D
LNAV MDA	7720-1 435 (500-1)		NA	
CIRCLING	7720-1 435 (500-1)	7740-1 455 (500-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	8208
346°	TDZE	7276
	Apt Elev	7285

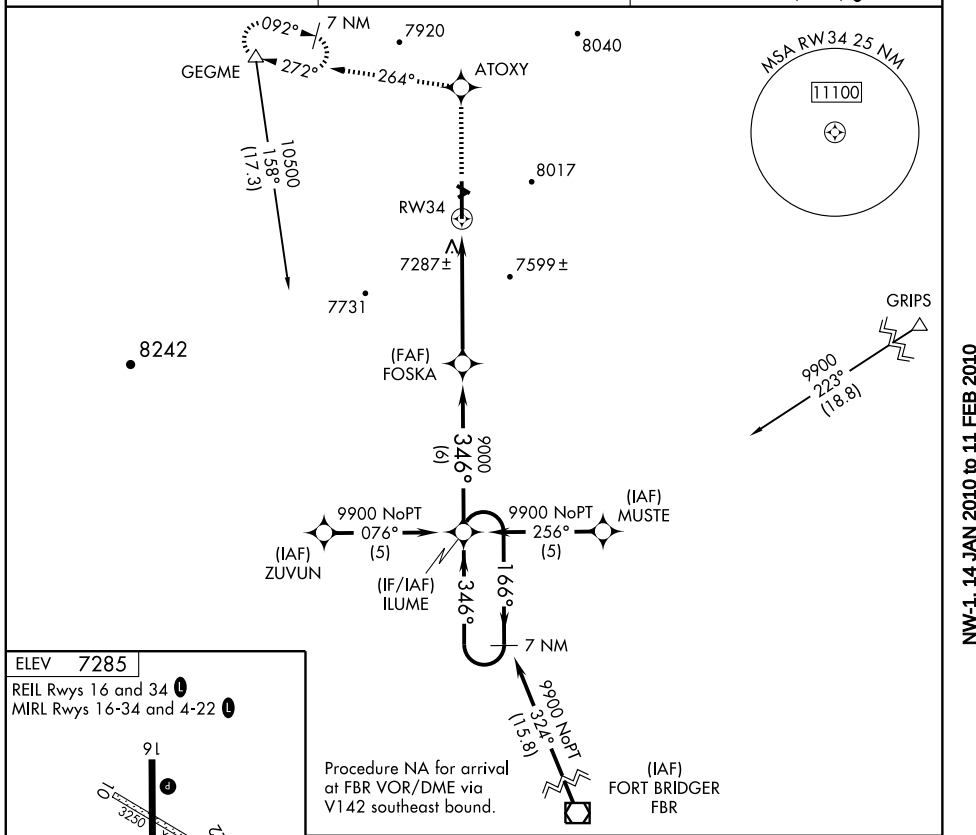
RNAV (GPS) RWY 34

KEMMERER MUNI (EMM)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Evanston altimeter setting and increase all MDA 120 feet.

MISSED APPROACH: Climb to 12000 direct ATOXY and via track 264° to GEGME and hold, continue climb-in-hold to 12000. When authorized by ATC, climb-in-hold to 14000.

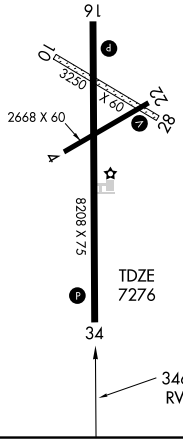
AWOS-3	SALT LAKE CITY CENTER	UNICOM
119.675	124.35 353.5	122.8 (CTAF) L

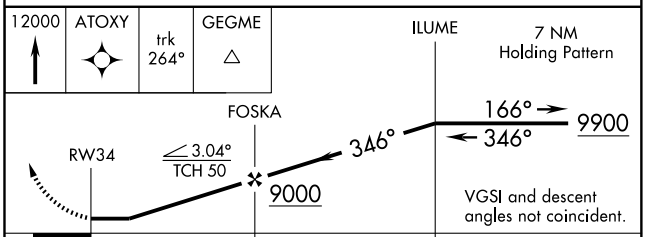


ELEV 7285

REIL Rwys 16 and 34 L

MIRL Rwys 16-34 and 4-22 L





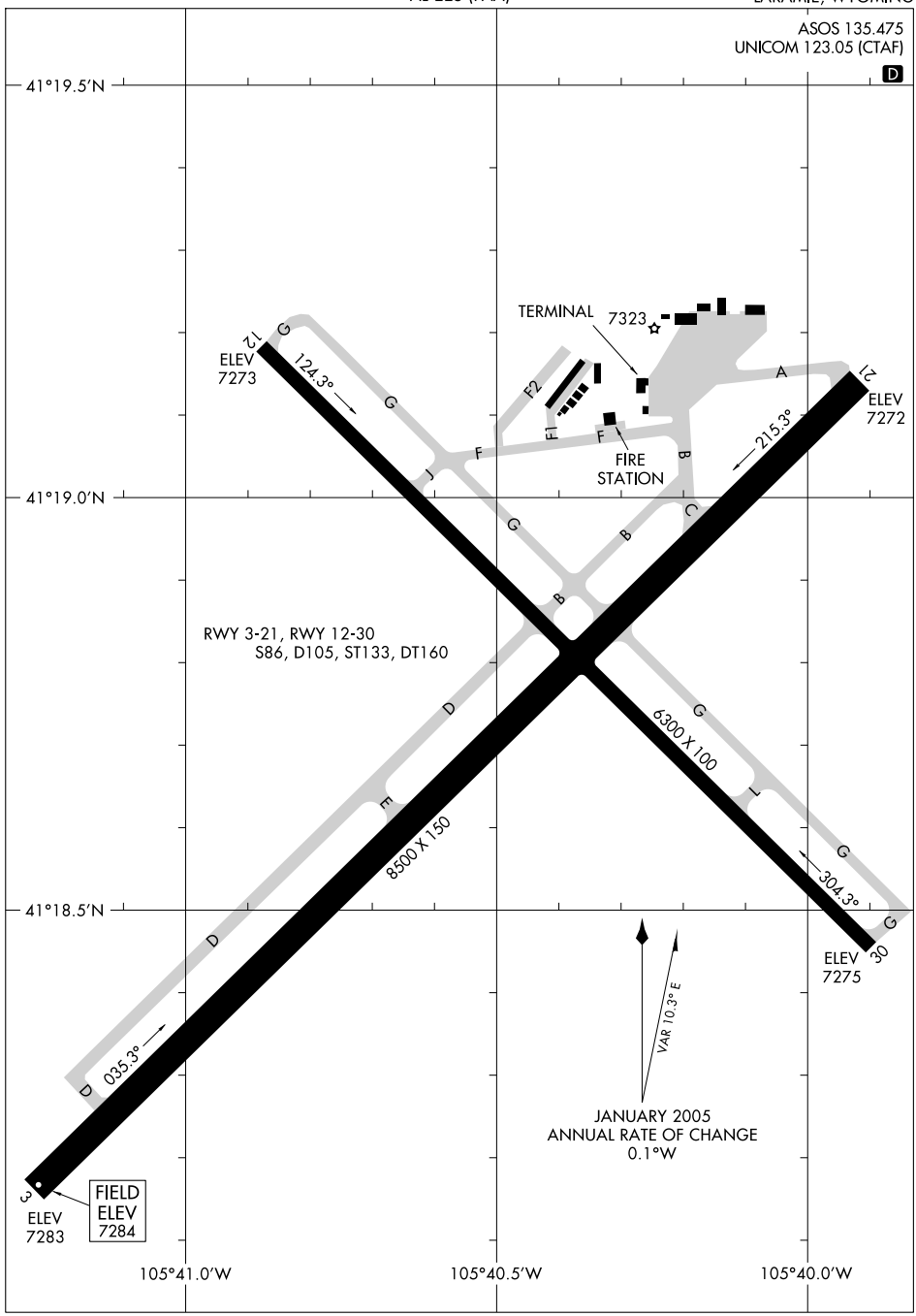
CATEGORY	A	B	C	D
LNAV MDA	7540-1	264 (300-1)	NA	
CIRCLING	7640-1 355 (400-1)	7740-1 455 (500-1)	NA	

NW-1, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-225 (FAA)

LARAMIE RGNL (LAR)
LARAMIE, WYOMING



NW-1, 14 JAN 2010 to 11 FEB 2010

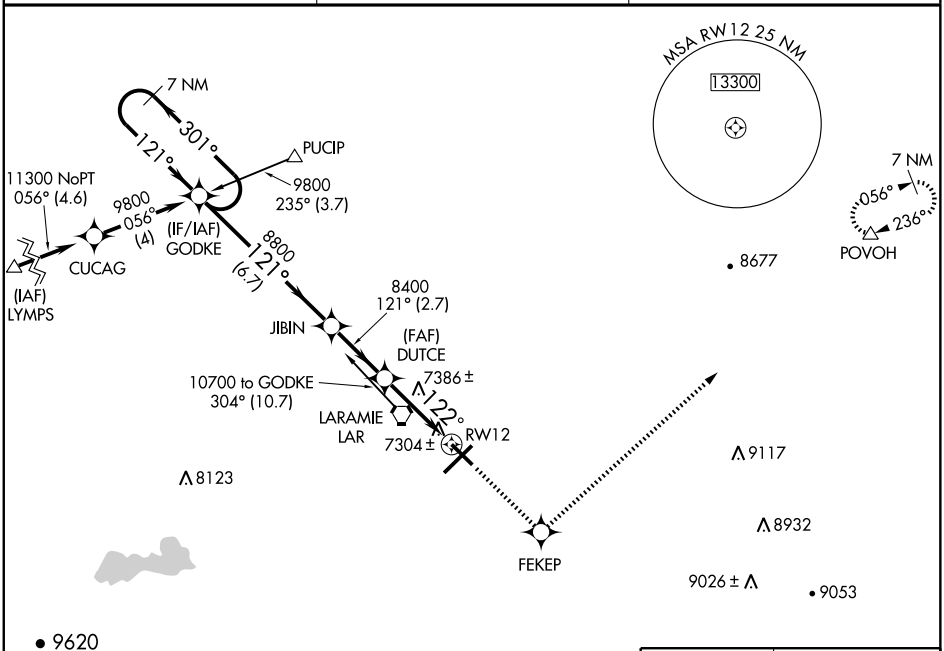
WAAS CH 70600 W12A	APP CRS 122°	Rwy Idg 6300 TDZE 7275 Apt Elev 7284

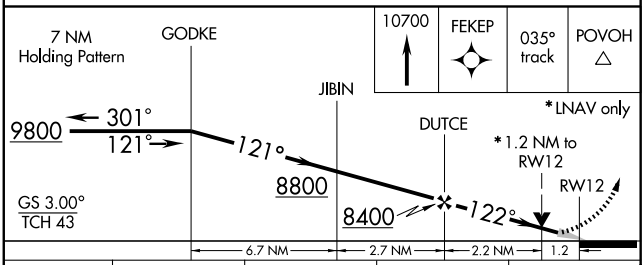
RNAV (GPS) RWY 12
LARAMIE RGNL (LAR)

DME/DME RNP -0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (93°F).

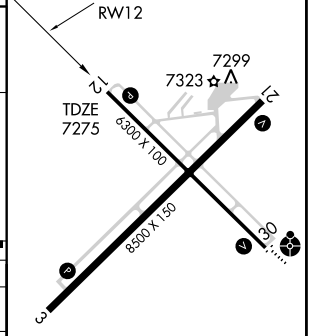
MISSED APPROACH: Climb to 10700 direct FEKEP and via 035° track to POVOH and hold.

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	7525-1 250 (300-1)			
LNAV/VNAV DA	7622-1¼ 347 (400-1¼)			
LNAV MDA	7700-1 425 (500-1)		7700-1¼ 425 (500-1¼)	
CIRCLING	7700-1¼ 416 (500-1¼)	7740-1¼ 456 (500-1¼)	7740-1½ 456 (500-1½)	7840-2 556 (600-2)



REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 53600 W30A	APP CRS 302°	Rwy Idg 6300 TDZE 7278 Apt Elev 7284

RNAV (GPS) RWY 30
LARAMIE RGNL (LAR)

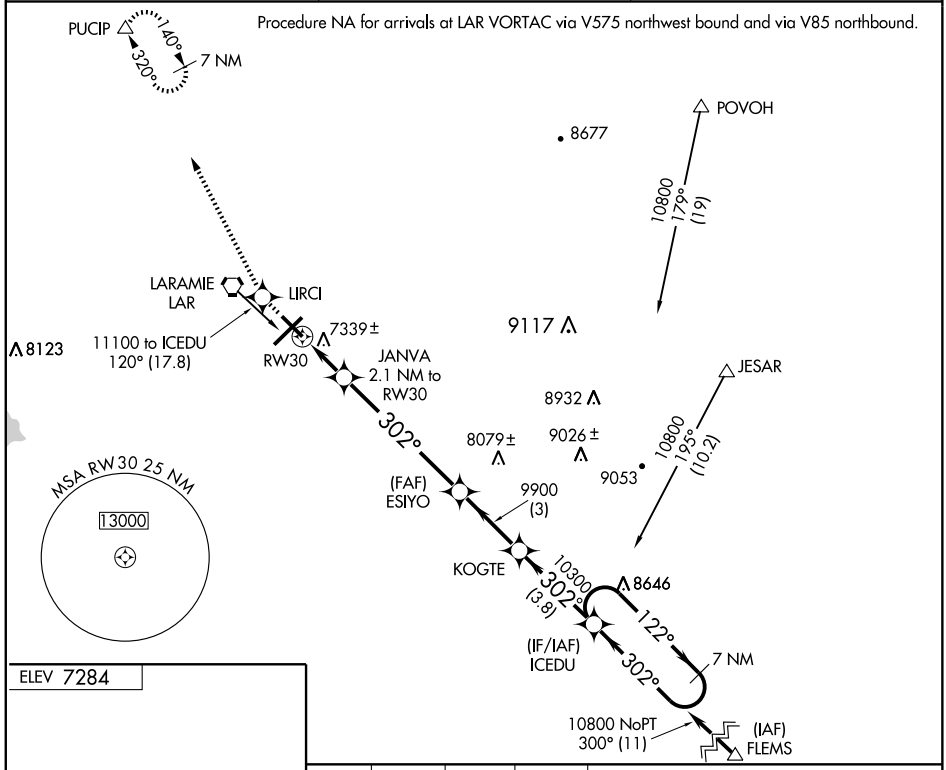
Inoperative table does not apply.
DME/DME RNP -0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 35°C (95°F).

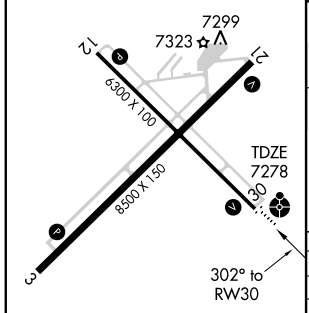
ODALS

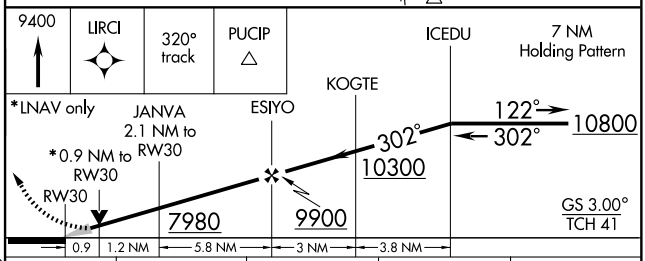
MISSED APPROACH: Climb to 9400 direct LIRCI and via 320° track to PUCIP and hold.

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L

Procedure NA for arrivals at LAR VORTAC via V575 northwest bound and via V85 northbound.







CATEGORY	A	B	C	D
LPV DA	7528-1 250 (300-1)			
LNAV/VNAV DA	7629-1¼ 351 (400-1¼)			
LNAV MDA	7600-1 322 (400-1)			
CIRCLING	7660-1¼ 376 (400-1¼)	7740-1¼ 456 (500-1¼)	7740-1½ 456 (500-1½)	7840-2 556 (600-2)

REIL Rwys 3,12 and 21 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 14 JAN 2010 to 11 FEB 2010

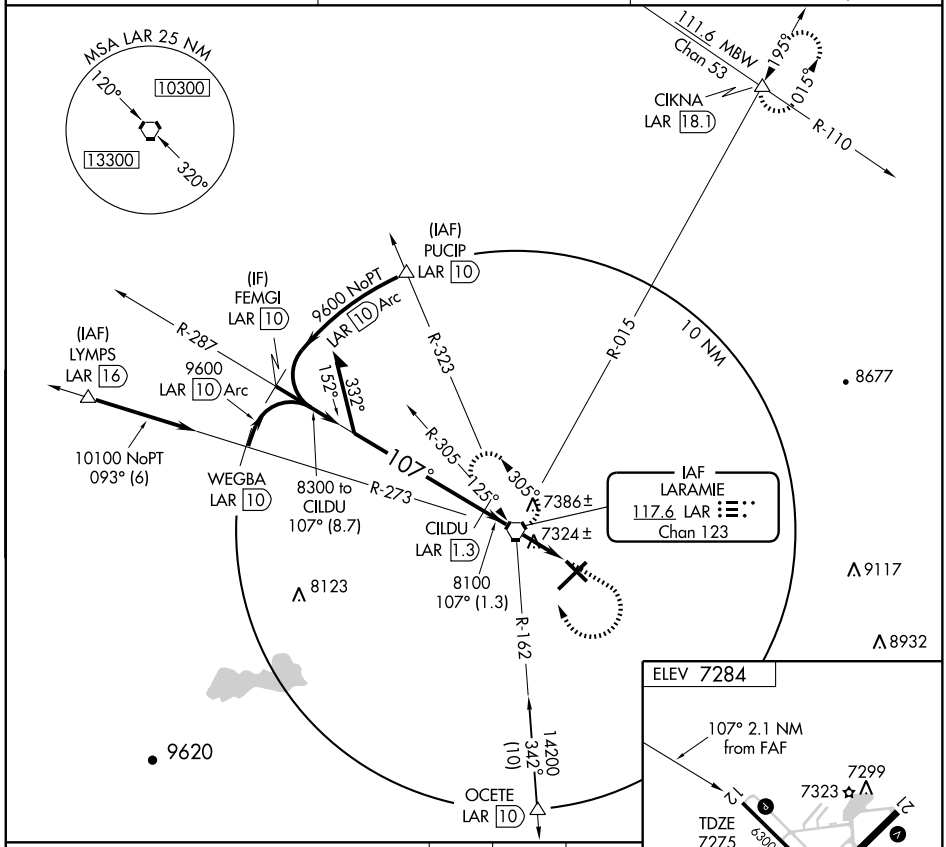
VORTAC LAR 117.6 Chan 123	APP CRS 107°	Rwy Idg 6300 TDZE 7275 Apt Elev 7284

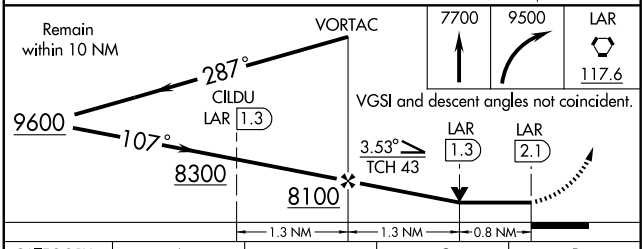
VOR/DME or TACAN RWY 12

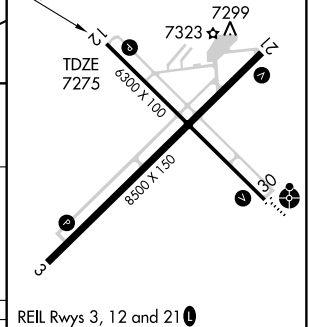
LARAMIE RGNL (LAR)

MISSED APPROACH: Climb to 7700 then climbing right turn to 9500 direct LAR VORTAC and hold, continue climb-in-hold to 9500 (TACAN aircraft continue climb to 10600 via LAR VORTAC R-015 to CIKNA/18.1 DME and hold north, left turn, 195° inbound).

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L







REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

CATEGORY	A	B	C	D
S-12	7580-1 305 (300-1)			
CIRCLING	7660-1 376 (400-1)	7740-1 456 (500-1)	7740-1½ 456 (500-1½)	7840-2 556 (600-2)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC LAR 117.6 Chan 123	APP CRS 292°	Rwy Idg 6300 TDZE 7278 Apt Elev 7284

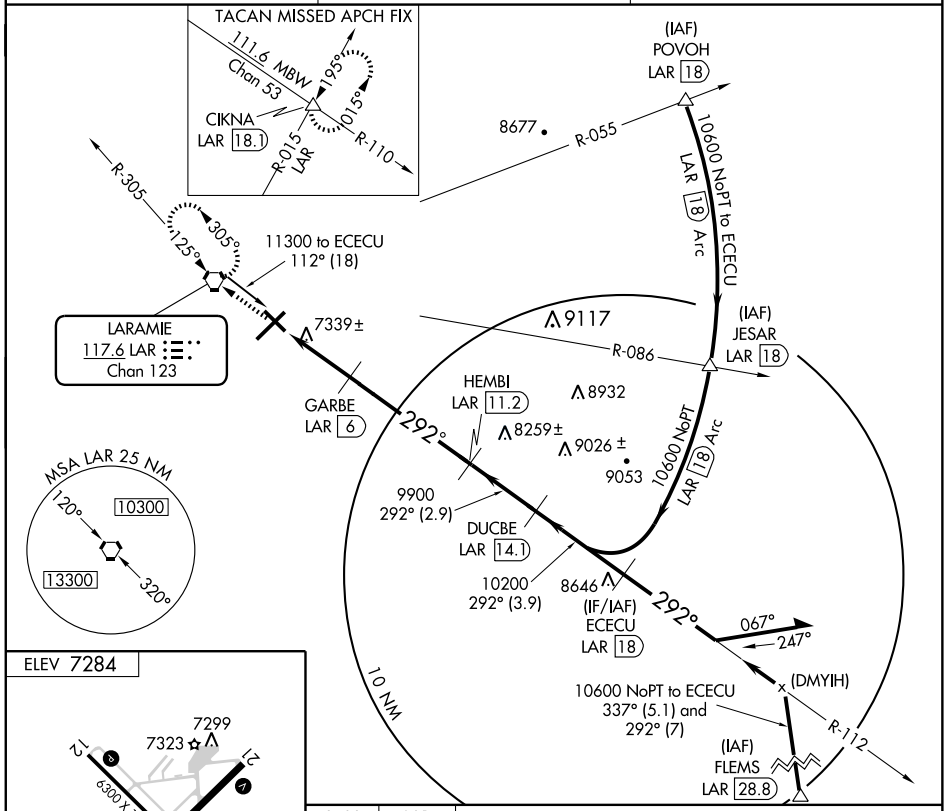
VOR/DME or TACAN RWY 30

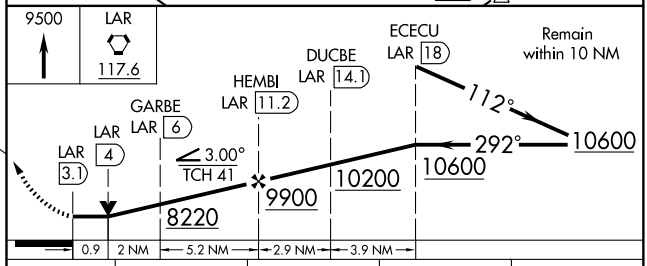
LARAMIE RGNL (LAR)

ODALS

MISSED APPROACH: Climb to 9500 direct LAR VORTAC and hold, continue climb-in-hold to 9500 (TACAN aircraft continue climb to 10600 via LAR VORTAC R-015 to CIKNA INT/18.1 DME and hold north, left turns, 195° inbound.

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L





REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-30	7600-¾ 322 (400-¾)			7600-1 322 (400-1)
CIRCLING	7660-1 376 (400-1)	7740-1 456 (500-1)	7740-1½ 456 (500-1½)	7840-2 556 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR ECS	APP CRS	Rwy Idg	5300
108.2	323°	TDZE	4174
		Apt Elev	4174

VOR or GPS RWY 31

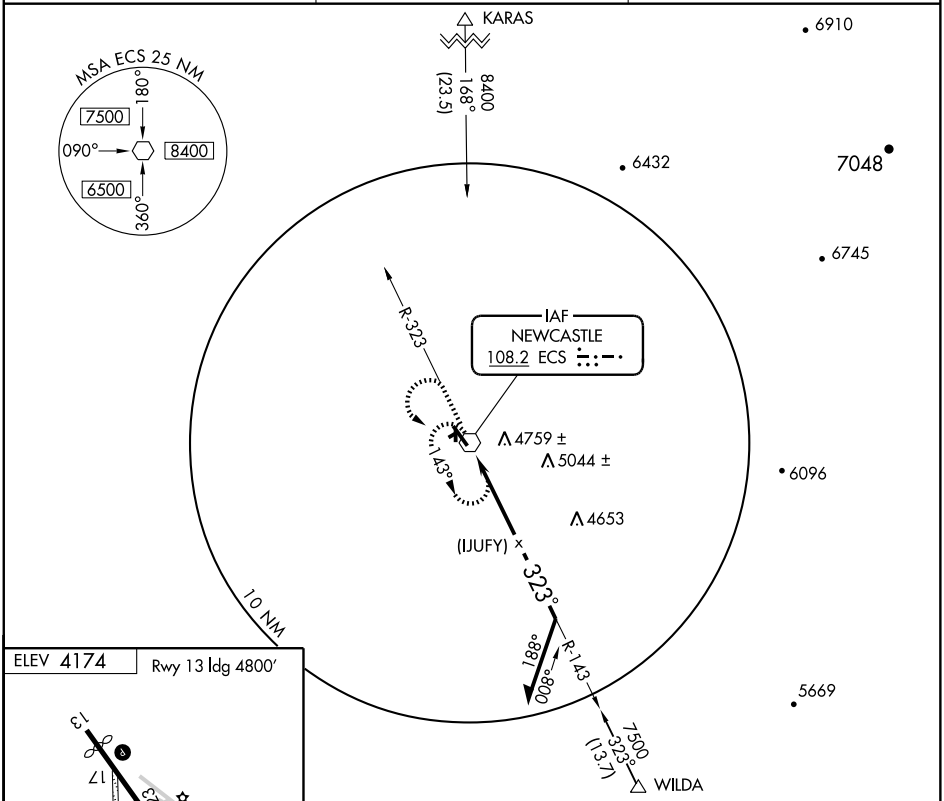
NEWCASTLE/MONDELL FIELD (ECS)

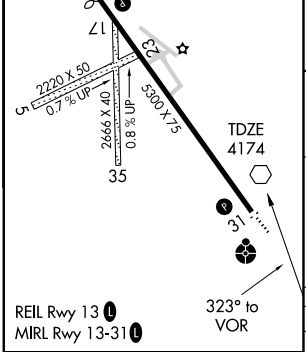
Circling east of Rwy 13-31 not authorized. Obtain local altimeter setting on CTAF when not received procedure not authorized.

ODALS

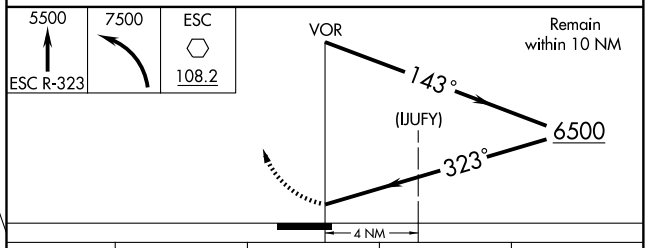
MISSED APPROACH: Climb to 5500 via ECS VOR R-323, then climbing left turn to 7500 direct ECS VOR and hold.

AWOS-3	DENVER CENTER	UNICOM
118.0	127.95 338.2	122.8 (CTAF) L





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-31	5060-1¼	886 (900-1¼)	5060-2¾ 886 (900-2¾)	5060-3 886 (900-3)
CIRCLING	5060-1¼	886 (900-1¼)	5060-2¾ 886 (900-2¾)	5060-3 886 (900-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB PNA	APP CRS	Rwy Idg	8900
392	309°	TDZE	N/A
		Apt Elev	7102

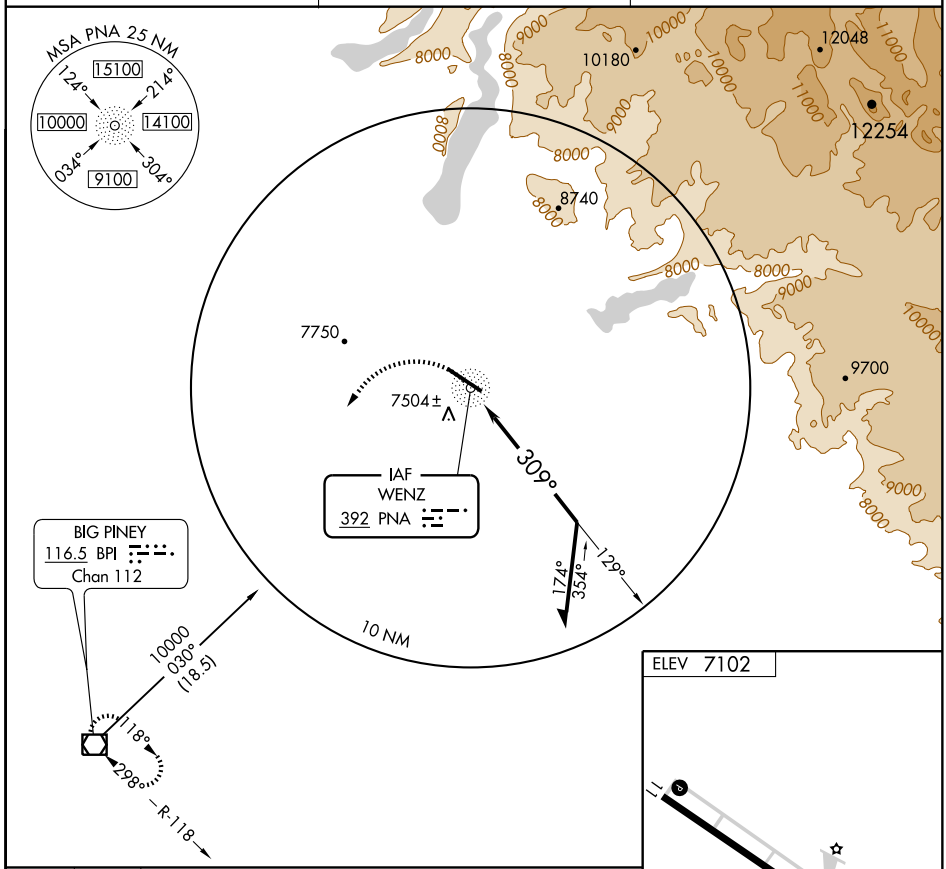
NDB-A

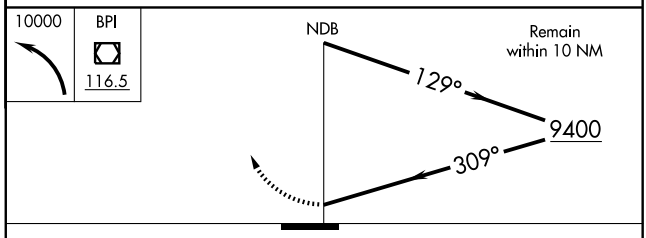
PINEDALE/ RALPH WENZ FIELD (PNA)

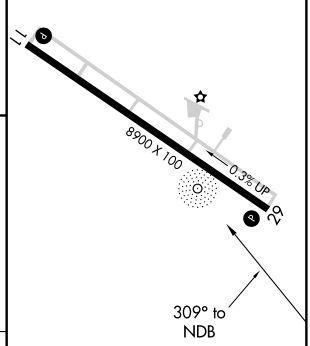
Procedure NA at night. When local altimeter setting not received, use Miley Memorial Field altimeter setting and increase all MDA 60 feet and visibility Cat C/D ¼ mile.

MISSED APPROACH: Climbing left turn to 10000 direct BPI VOR/DME and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.325	128.35 239.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	7900-1 798 (800-1)	7900-1¼ 798 (800-1¼)	7900-2¼ 798 (800-2¼)	7900-2½ 798 (800-2½)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 11

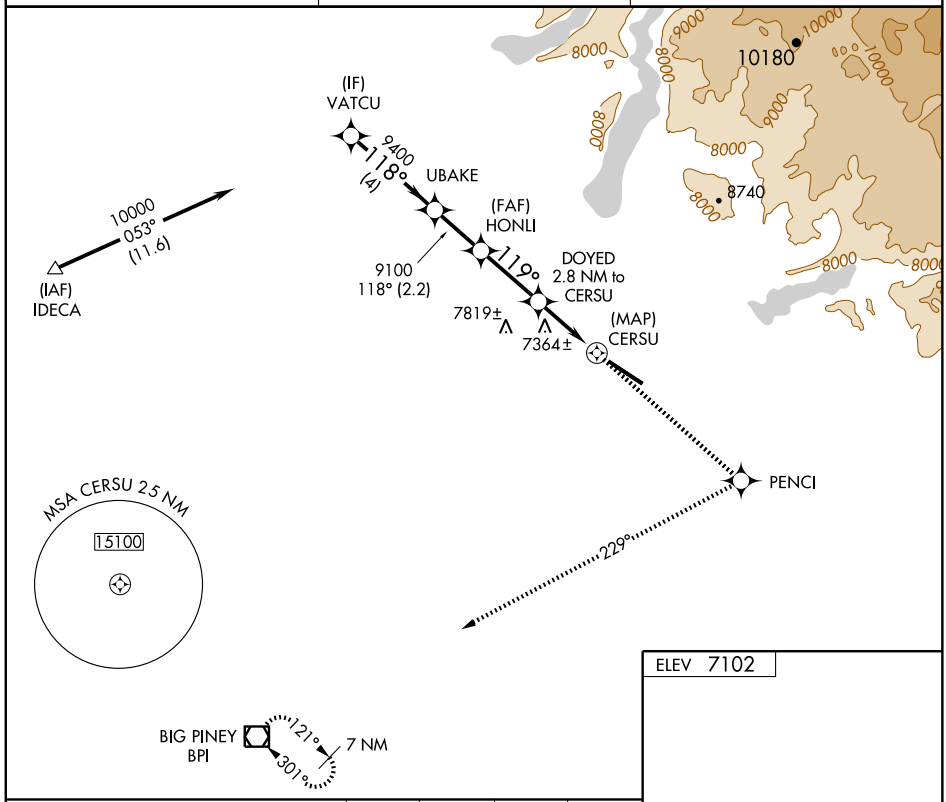
PINEDALE/ RALPH WENZ FIELD (PNA)

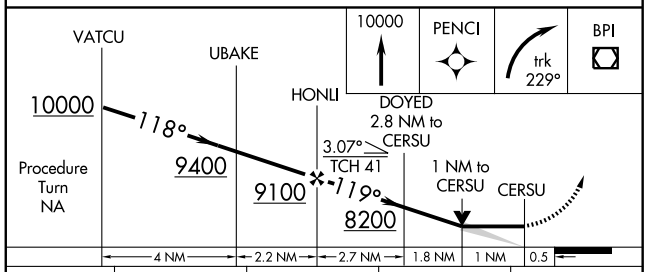
APP CRS	Rwy Idg	8900
119°	TDZE	7102
	Apt Elev	7102

Circling NA at night. DME/DME RNP- 0.3 NA. VDP NA when using Miley Memorial Field altimeter setting. When local altimeter setting not received, use Miley Memorial Field altimeter setting and increase all MDA 60 feet and circling Cats B/C/D visibility ¼ mile.

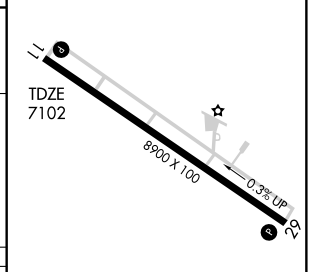
MISSED APPROACH: Climb to 10000 direct PENCI and right turn via track 229° to BPI VOR/DME and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.325	128.35 239.25	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	7620-1 518 (600-1)		7620-1½ 518 (600-1½)	7620-1¾ 518 (600-1¾)
CIRCLING	7760-1 658 (700-1)	7820-1 718 (800-1)	7840-2 738 (800-2)	7860-2½ 758 (800-2½)



REIL Rwys 11 and 29 L

MIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	8900
291°	TDZE	7081
	Apt Elev	7102

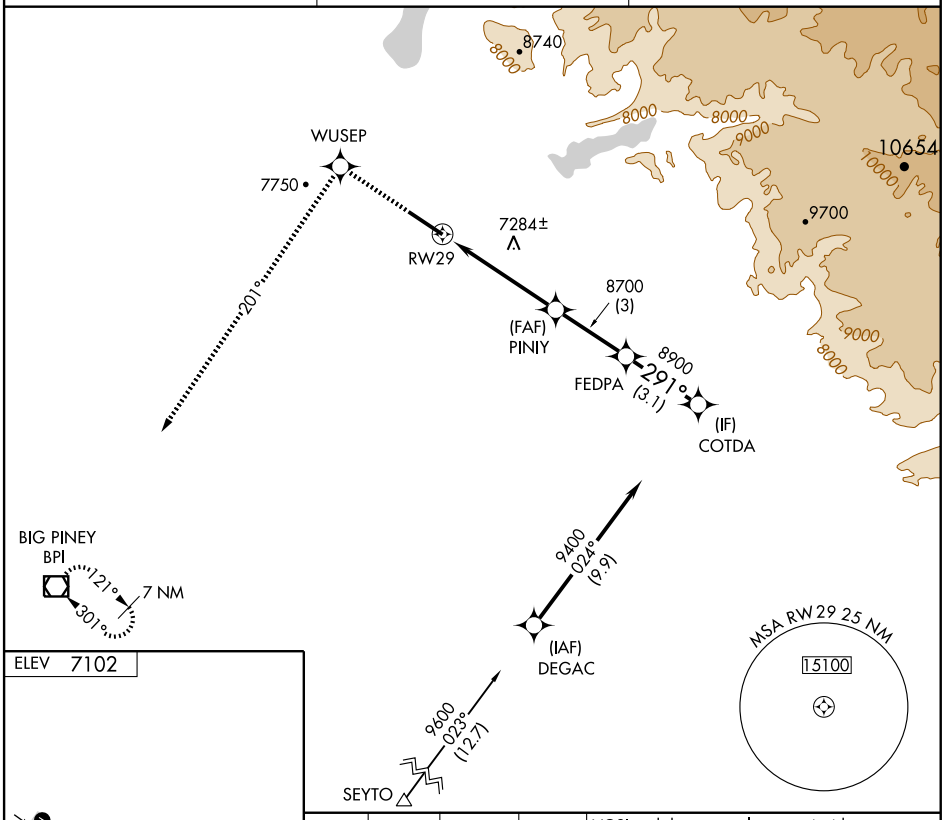
RNAV (GPS) RWY 29

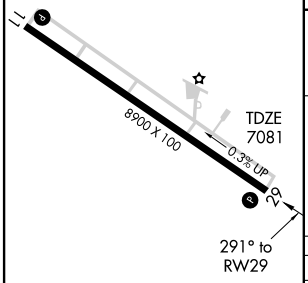
PINEDALE/ RALPH WENZ FIELD (PNA)

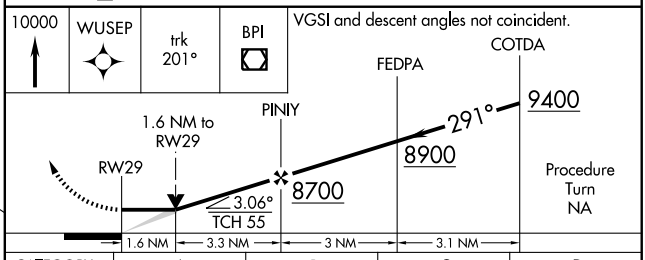
DME/DME RNP-0.3 NA. Procedure NA at night. VDP NA when using Miley Memorial Field altimeter setting. When local altimeter setting not received, use Miley Memorial Field altimeter setting and increase all MDA 60 feet and circling Cats B/C/D visibility ¼ mile.

MISSED APPROACH: Climb to 10000 direct WUSEP and via track 201° to BPI VOR/DME and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.325	128.35 239.25	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	7600-1 519 (500-1)		7600-1½ 519 (500-1½)	7600-1¾ 519 (500-1¾)
CIRCLING	7760-1 658 (700-1)	7820-1 718 (800-1)	7840-2 738 (800-2)	7860-2½ 758 (800-2½)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB POY 344	APP CRS 320°	Rwy Idg 6205 TDZE 5092 Apt Elev 5092

NDB or GPS RWY 31

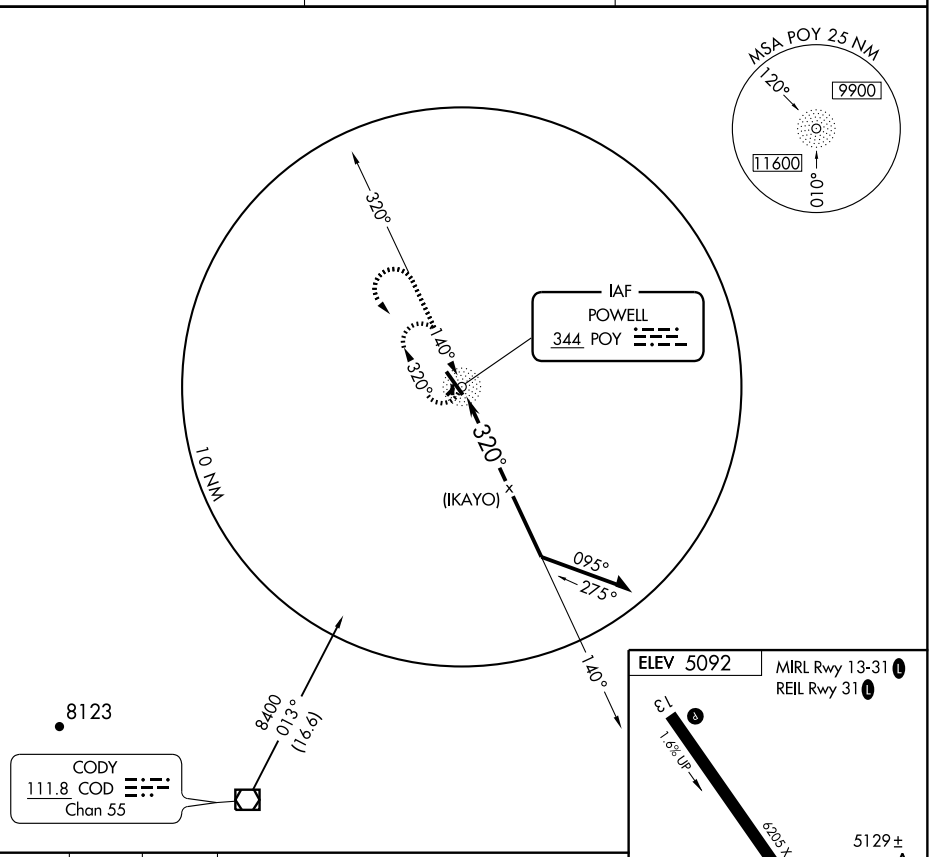
POWELL MUNI (POY)

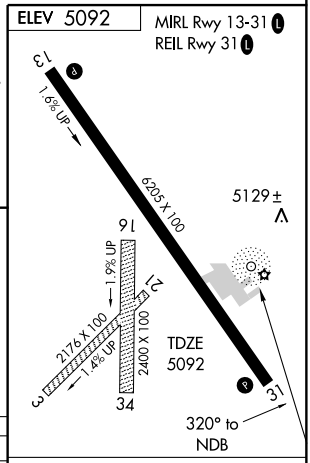
Obtain local altimeter setting on CTAF; when not received, procedure not authorized.

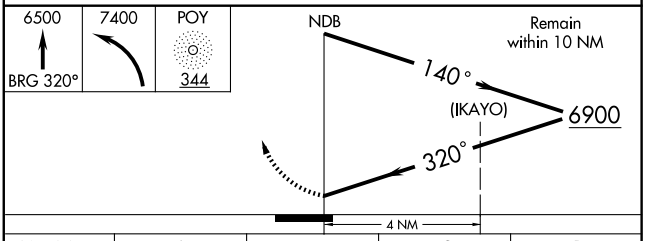
NA

MISSED APPROACH: Climb to 6500 via 320° bearing from POY NDB then climbing left turn to 7400 direct POY NDB and hold.

AWOS-3	CASPER RADIO	UNICOM
119.275	122.3	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-31	5500-1 408 (500-1)		5500-1¼ 408 (500-1¼)	
CIRCLING	5500-1 408 (500-1)	5560-1 468 (500-1)	5560-1½ 468 (500-1½)	5660-2 568 (600-2)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB SIR	APP CRS	Rwy Idg	N/A
368	259°	TDZE	N/A
		Apt Elev	6813

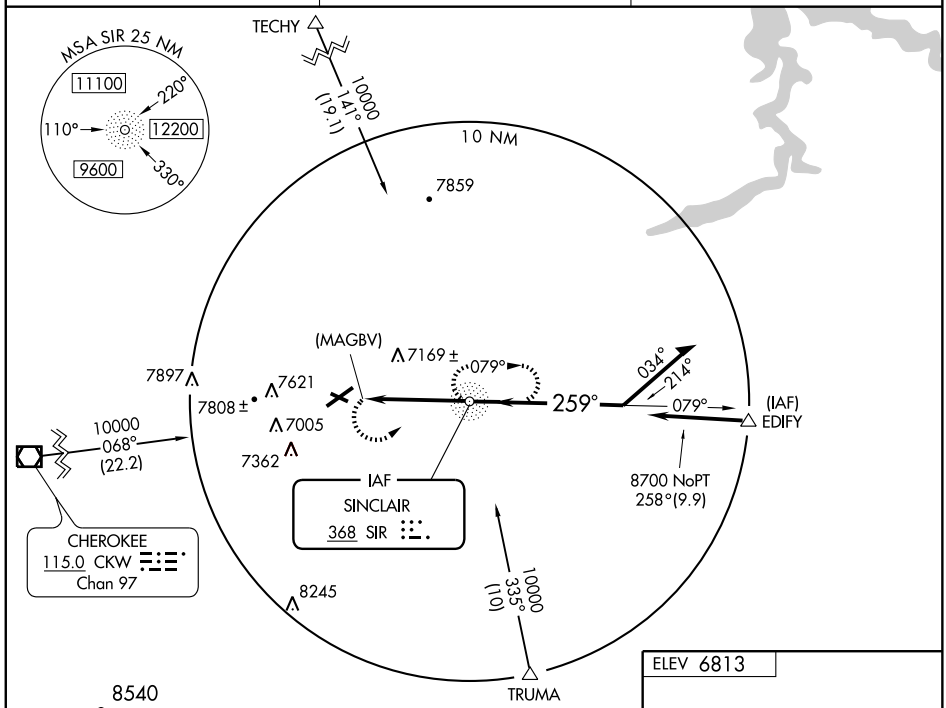
NDB or GPS-A

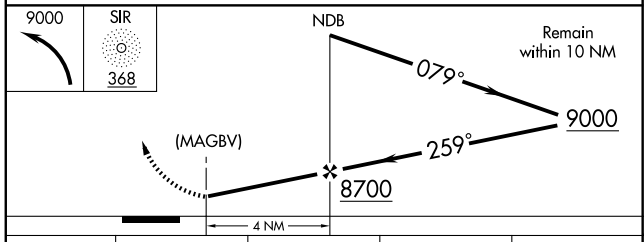
RAWLINS MUNI/HARVEY FIELD (RWL)

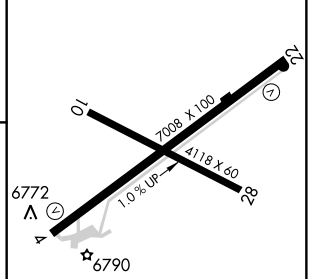
Circling not authorized NW of Rwy 4-22.

MISSED APPROACH: Climbing left turn to 9000 direct SIR NDB and hold.

ASOS	DENVER CENTER	UNICOM
118.525	132.1 254.35	123.0 (CTAF) L







REIL Rwys 22 and 28 L

MIRL Rwys 4-22 and 10-28 L

CATEGORY	A	B	C	D
CIRCLING	7480-1 667 (700-1)		7480-1¾ 667 (700-1¾)	7720-3 907 (1000-3)

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME RWL	APP CRS	Rwy Idg	7008
109.4	224°	TDZE	6813
Chan 31		Apt Elev	6813

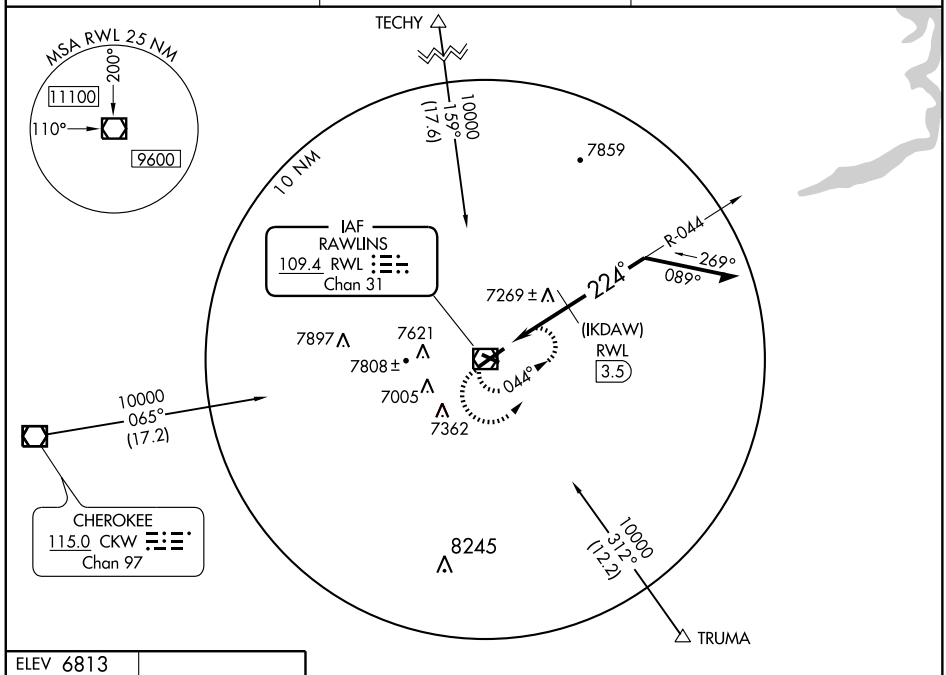
VOR or GPS RWY 22

RAWLINS MUNI/HARVEY FIELD (RWL)

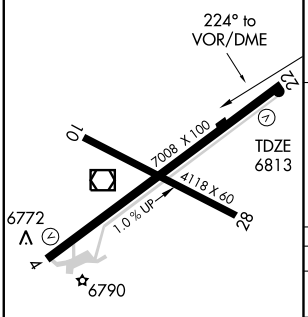
Circling not authorized northwest of Runway 4-22.

MISSED APPROACH: Climbing left turn to 9300 via RWL R-044 within 10 NM, then direct RWL VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
118.525	132.1 254.35	123.0 (CTAF) L



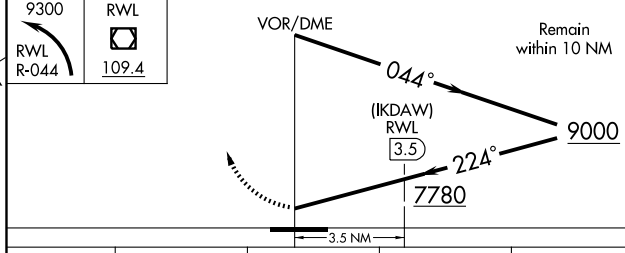
ELEV 6813



REIL Rwys 22 and 28 L

MIRL Rwys 4-22 and 10-28 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-22	7780-1¼ 967 (1000-1¼)	7780-1½ 967 (1000-1½)	7780-3 967 (1000-3)	
CIRCLING	7780-1¼ 967 (1000-1¼)	7780-1½ 967 (1000-1½)	7780-3 967 (1000-3)	
DME MINIMA				
S-22	7520-1 707 (800-1)		7520-2 707 (800-2)	7720-3 907 (1000-3)
CIRCLING	7520-1 707 (800-1)		7520-2 707 (800-2)	7720-3 907 (1000-3)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	8203
280°	TDZE	5456
	Apt Elev	5525

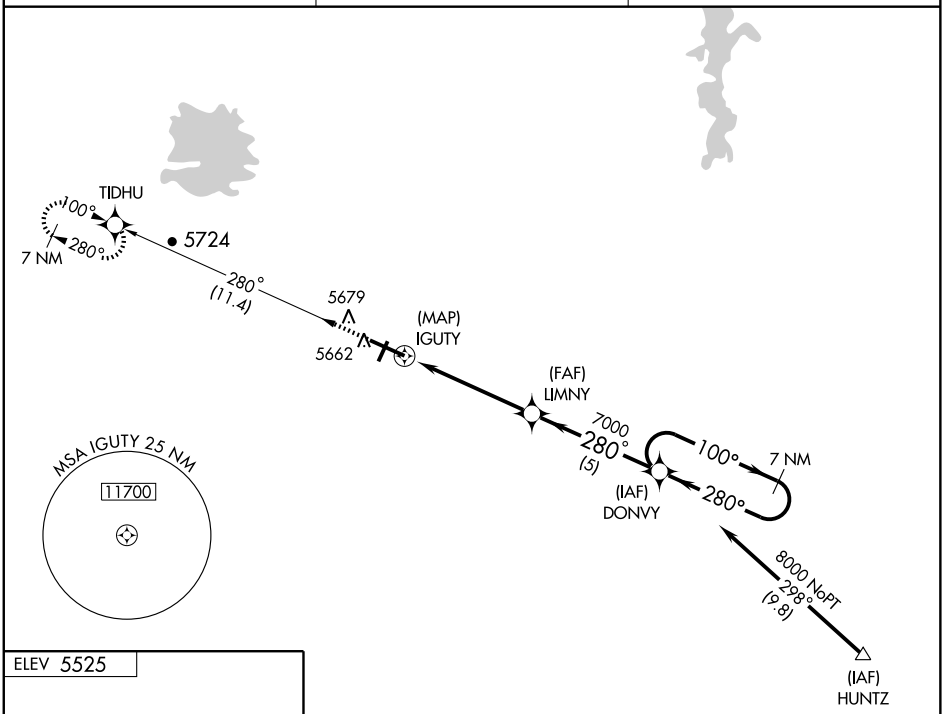
GPS RWY 28
RIVERTON RGNL (RIW)

T
NA For inoperative MALSR increase S-28 Cat D visibility to 1¼ mile.

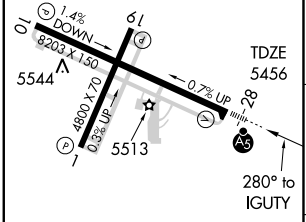
MALSR

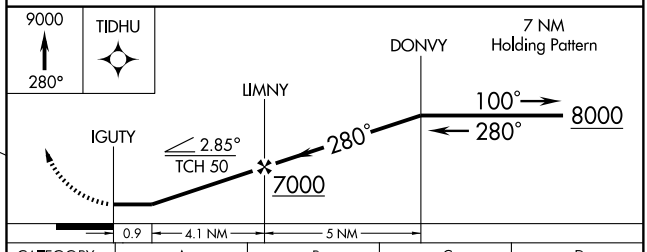
MISSED APPROACH: Climb to 9000 via 280° course to TIDHU WP and hold.

ASOS	CASPER RADIO	UNICOM
121.425	122.2	122.8 (CTAF) L



ELEV 5525





CATEGORY	A	B	C	D
S-28	5820-½ 364 (300-½)			5820-1 364 (300-1)
CIRCLING	5980-1 455 (500-1)		5980-1½ 455 (500-1½)	6080-2 555 (600-2)

REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC I-RIW	APP CRS	Rwy Idg	8203
110.5	280°	TDZE	5456
		Apt Elev	5525

ILS or LOC RWY 28

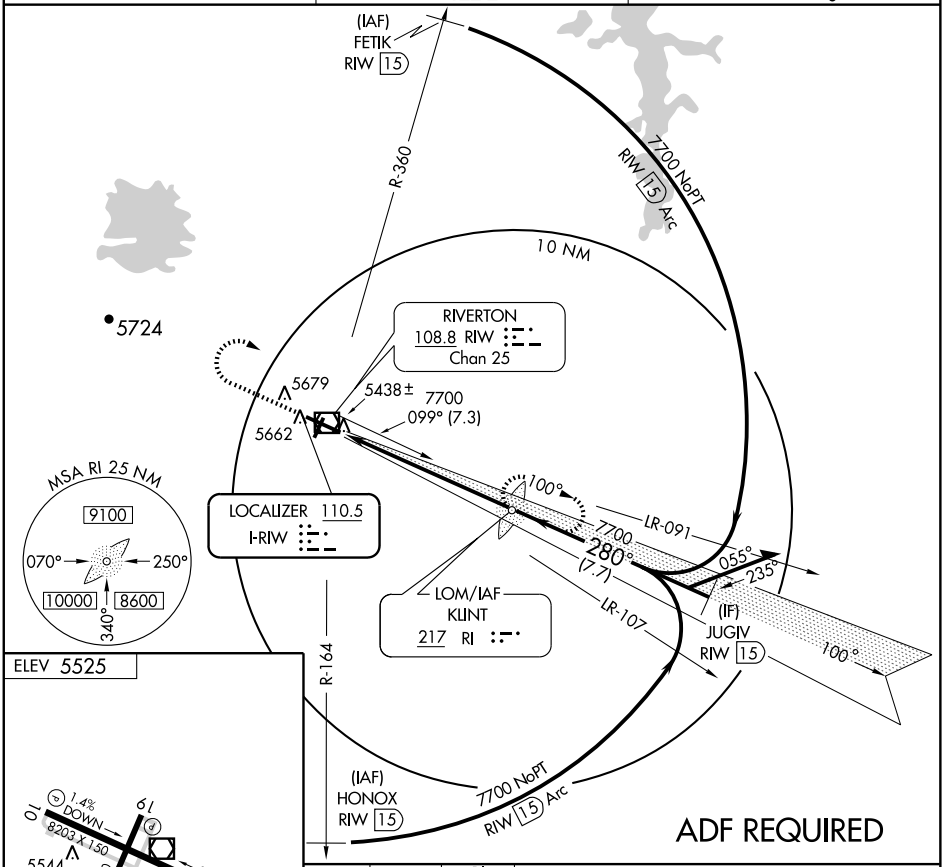
RIVERTON RGNL (RIW)

T NA — For inoperative MALSR, increase Cat D S-LOC visibility to 1 mile. When local altimeter setting not received, use Lander altimeter setting and increase all DAs/MDAs 80 feet. When using Lander altimeter setting, for inoperative MALSR, increase S-ILS 28 all Cat visibility to 1 mile.

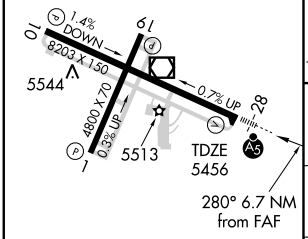
MALSR

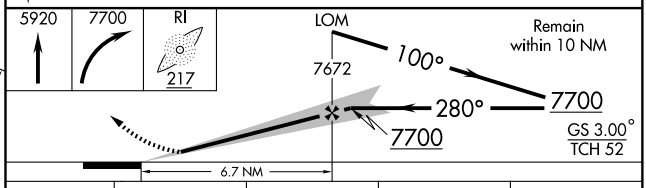
MISSED APPROACH: Climb to 5920 then climbing right turn to 7700 direct RI LOM and hold.

ASOS	CASPER RADIO	UNICOM
121.425	122.2	122.8 (CTAF) L



ELEV 5525





REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

CATEGORY	A	B	C	D
S-ILS 28	5656-½ 200 (200-½)			
S-LOC 28	5760-½ 304 (300-½)			5760-¾ 304 (300-¾)
CIRCLING	5980-1 455 (500-1)		5980-1½ 455 (500-1½)	6080-2 555 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 42899 W10A	APP CRS 100°	Rwy Idg 8203 TDZE 5525 Apt Elev 5525

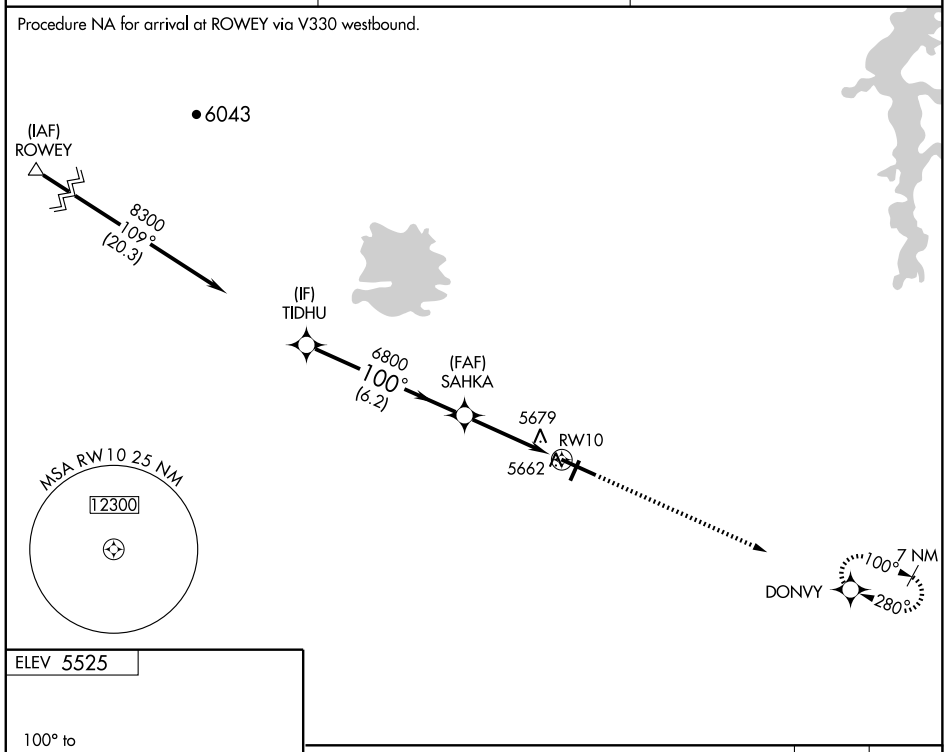
RNAV (GPS) RWY 10
RIVERTON RGNL (RIW)

Baro-VNAV NA below -26°C (-14°F).
DME/DME RNP-0.3 NA.

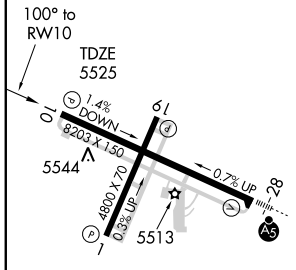
MISSED APPROACH: Climb to 9000 direct DONVY and hold, continue climb-in-hold to 9000.

ASOS	CASPER RADIO	UNICOM
121.425	122.2	122.8 (CTAF) L

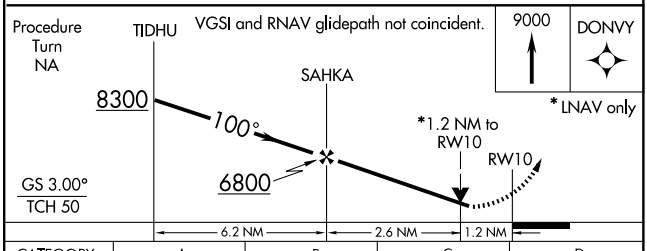
Procedure NA for arrival at ROWEY via V330 westbound.



ELEV 5525



REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L



CATEGORY	A	B	C	D
LPV DA	5882-1¼ 357 (400-1¼)			
LNAV/VNAV DA	5974-1½ 449 (500-1½)			
LNAV MDA	5940-1 415 (500-1)		5940-1¼ 415 (500-1¼)	
CIRCLING	5980-1½ 455 (500-1½)			6080-2 555 (600-2)

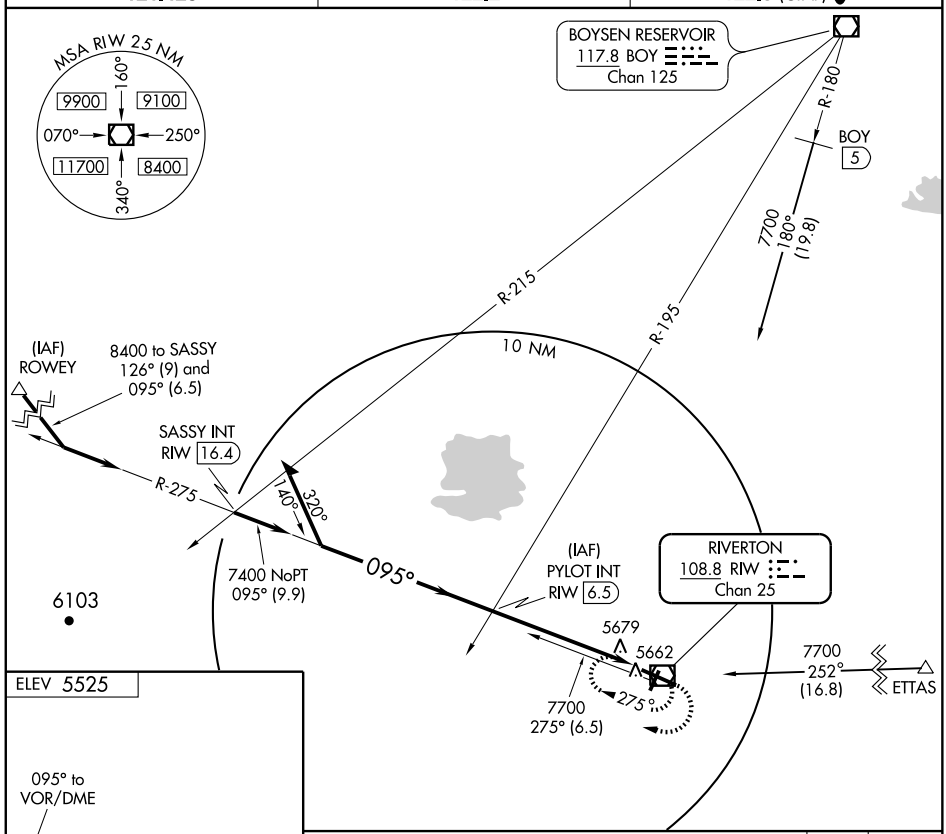
NW-1, 14 JAN 2010 to 11 FEB 2010

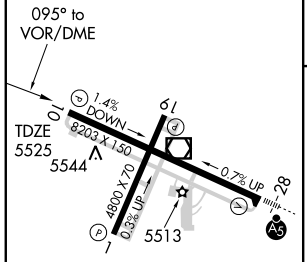
VOR/DME RIW	APP CRS	Rwy Idg	8203
108.8	095°	TDZE	5525
Chan 25		Apt Elev	5525

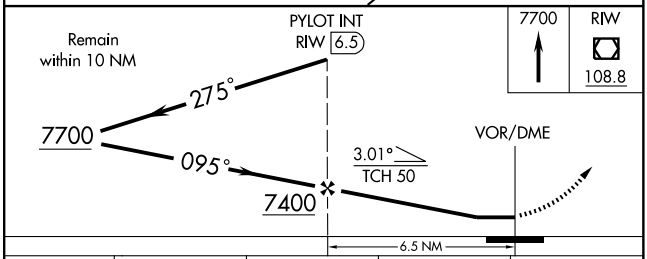
VOR RWY 10
RIVERTON RGNL (RIW)

MISSED APPROACH: Climb to 7700 in RIW VOR/DME holding pattern.

ASOS	CASPER RADIO	UNICOM
121.425	122.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-10	5940-1 415 (500-1)		5940-1¼ 415 (500-1¼)	
CIRCLING	5980-1 455 (500-1)		5980-1½ 455 (500-1½)	6080-2 555 (600-2)

REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VOR/DME RIW	APP CRS	Rwy Idg	8203
108.8	287°	TDZE	5456
Chan 25		Apt Elev	5525

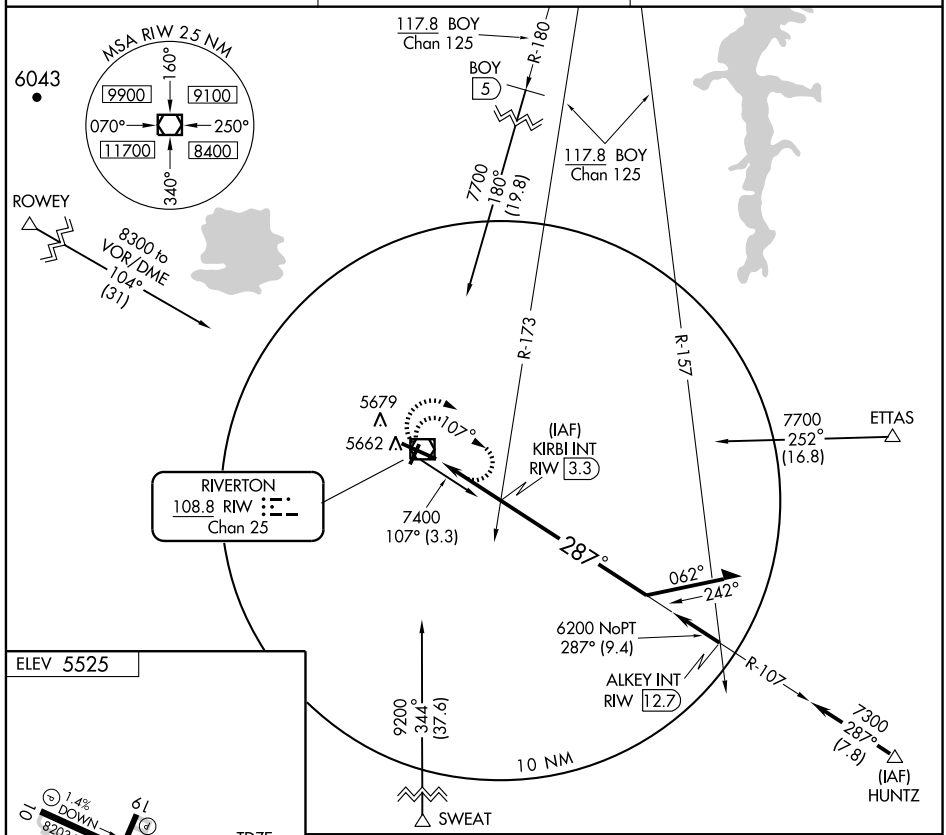
VOR RWY 28
RIVERTON RGNL (RIW)

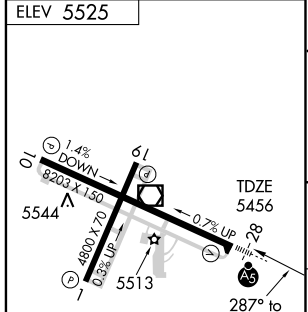
Inoperative table does not apply to Cat. D.

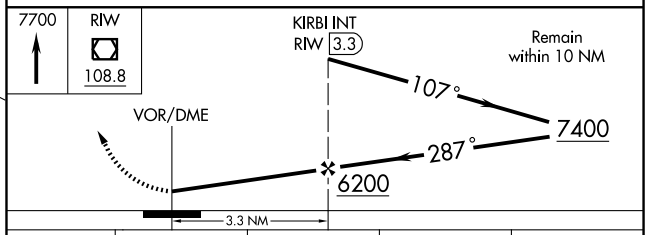
MALSR

MISSED APPROACH: Climb to 7700 in RIW VOR/DME holding pattern.

ASOS	CASPER RADIO	UNICOM
121.425	122.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-28	5780-½ 324 (300-½)			5780-1 324 (300-1)
CIRCLING	5980-1 455 (500-1)		5980-1½ 455 (500-1½)	6080-2 555 (600-2)

REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RKS	APP CRS	Rwy Idg	10000
109.3	270°	TDZE	6760
Chan 30		Apt Elev	6760

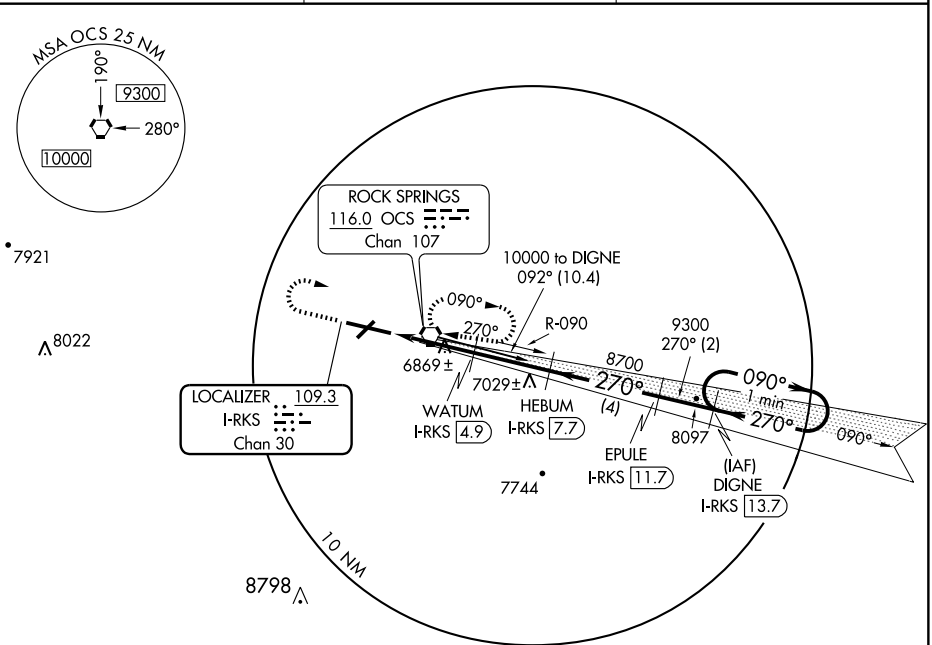
ILS or LOC/DME RWY 27

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

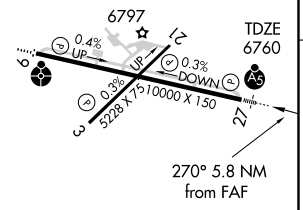
MALSR

MISSED APPROACH: Climb to 7400, then climbing right turn to 9300 direct OCS VORTAC and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L

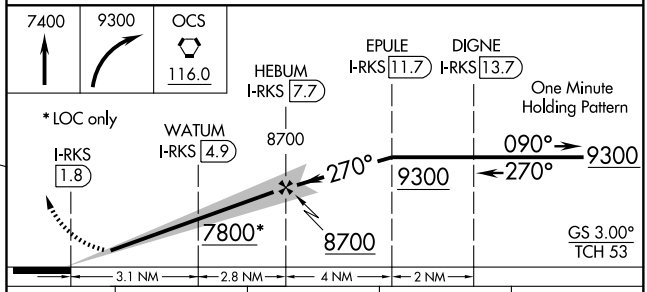


ELEV 6760



REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

DME REQUIRED



CATEGORY	A	B	C	D
S-ILS-27	6960- ½ 200 (200-½)			
S-LOC 27	7120-½ 360 (400-½)		7120-¾ 360 (400-¾)	7220-¾ 360 (400-¾)
CIRCLING	7120-1 360 (400-1)	7220-1 460 (500-1)	7220-1½ 460 (500-1½)	7320-2 560 (600-2)

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	10000
270°	TDZE	6764
	Apt Elev	6764

RNAV (GPS) Y RWY 27

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

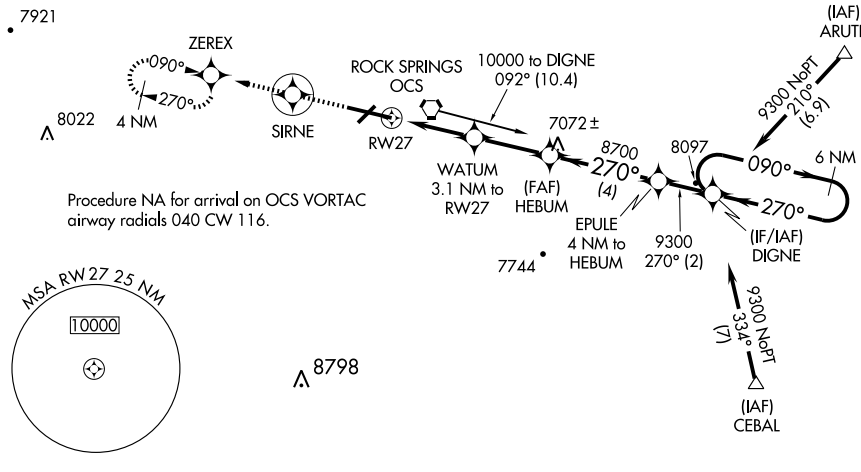
DME/DME RNP- 0.3 NA.
For inoperative MALSR, increase Cat D visibility to 1¼ mile.

MALSR

MISSED APPROACH: Climb to 9300 direct SIRNE WP and via 270° track to ZEREX WP and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L

Procedure NA for arrival at ARUTE on V4-6 eastbound.

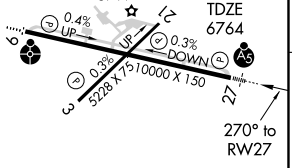


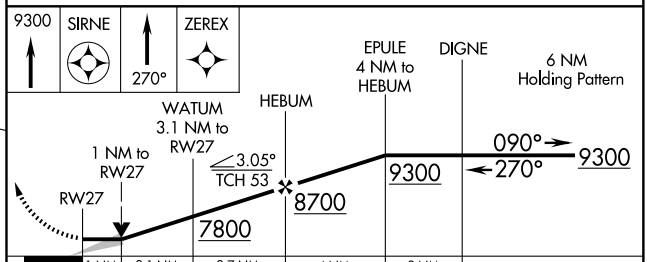
Procedure NA for arrival on OCS VORTAC airway radials 040 CW 116.

8798

Procedure NA for arrival at CEBAL on V328 southeast bound.

ELEV 6764





CATEGORY	A	B	C	D
LNAV MDA	7120-½ 356 (400-½)			7120-1 356 (400-1)
CIRCLING	7120-1 356 (400-1)	7220-1 456 (500-1)	7220-1¼ 456 (500-1¼)	7320-1¾ 556 (600-1¾)

REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	10000
270°	TDZE	6760
	Apt Elev	6760

RNAV (GPS) Z RWY 27

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

T
NA

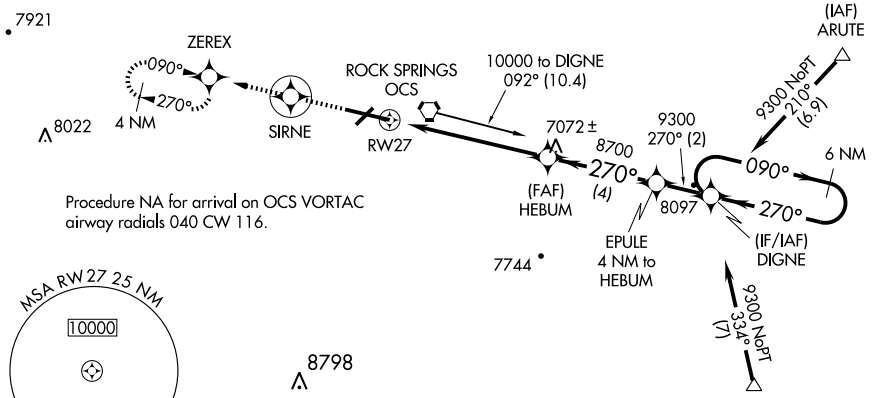
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Baro-VNAV NA below -28°C (-18°F).
For inoperative MALSR, increase LNAV/VNAV Cat. D visibility to 1 mile.

MALSR

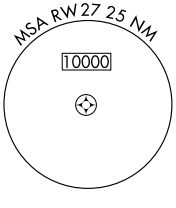
MISSED APPROACH: Climb to 9300 direct SIRNE WP and via 270° track to ZEREX WP and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L

Procedure NA for arrival at ARUTE on V4-6 eastbound.

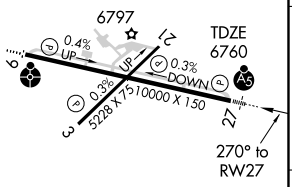


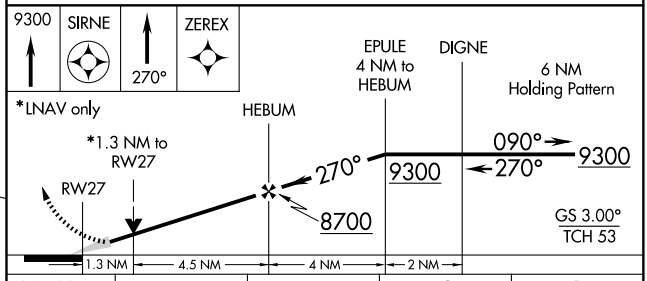
Procedure NA for arrival on OCS VORTAC airway radials 040 CW 116.



Procedure NA for arrival at CEBAL on V328 southeast bound.

ELEV 6760





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	7040-½ 280 (300-½)			7040-¾ 280 (300-¾)
LNAV MDA	7220-½ 460 (500-½)		7220-¾ 460 (500-¾)	7220-1 460 (500-1)
CIRCLING	7220-1 460 (500-1)		7220-1½ 460 (500-1½)	7320-2 560 (600-2)

REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

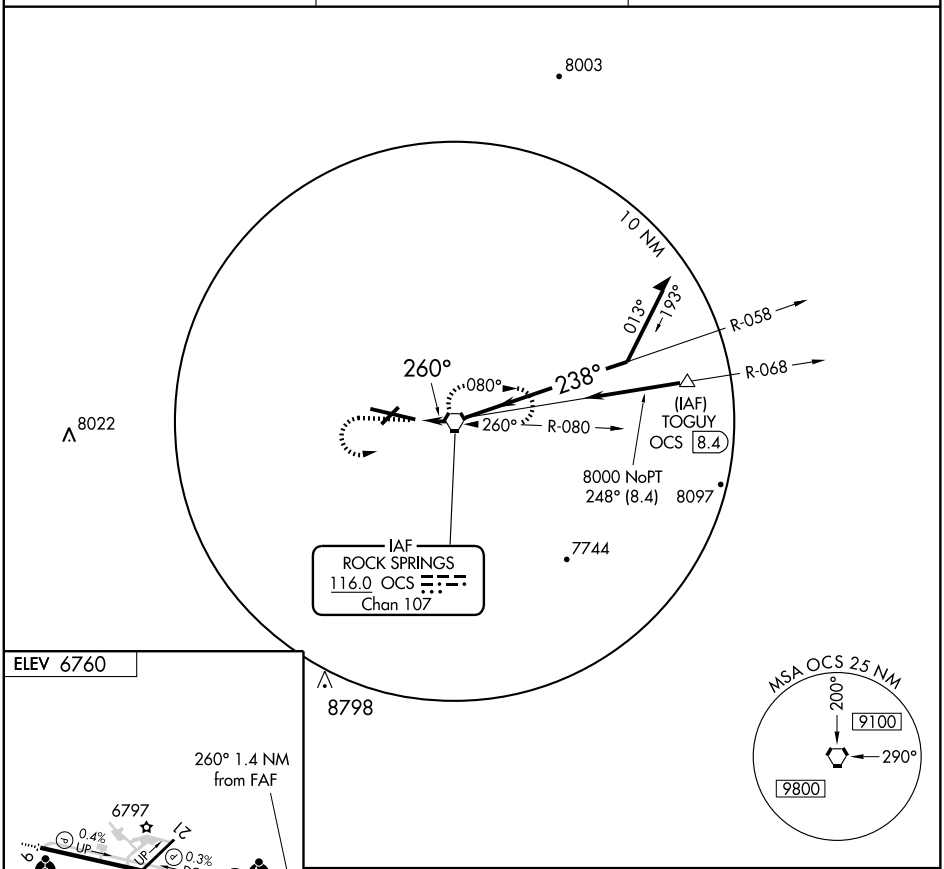
VORTAC OCS 116.0 Chan 107	APP CRS 260°	Rwy Idg N/A TDZE N/A Apt Elev 6760

VOR-B

ROCK SPRINGS-SWEETWATER COUNTY (RKS)

MISSED APPROACH: Climb to 7700, then climbing left turn to 9100 direct OCS VORTAC and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L



REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

FAF to MAP 1.4 NM					
Knots	60	90	120	150	180
Min:Sec	1:24	0:56	0:42	0:34	0:28

CATEGORY	A	B	C	D
CIRCLING	7440-1 680 (700-1)		7440-2 680 (700-2)	7440-2¼ 680 (700-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OCS	APP CRS	Rwy Idg	10000
116.0	085°	TDZE	6737
Chan 107		Apt Elev	6760

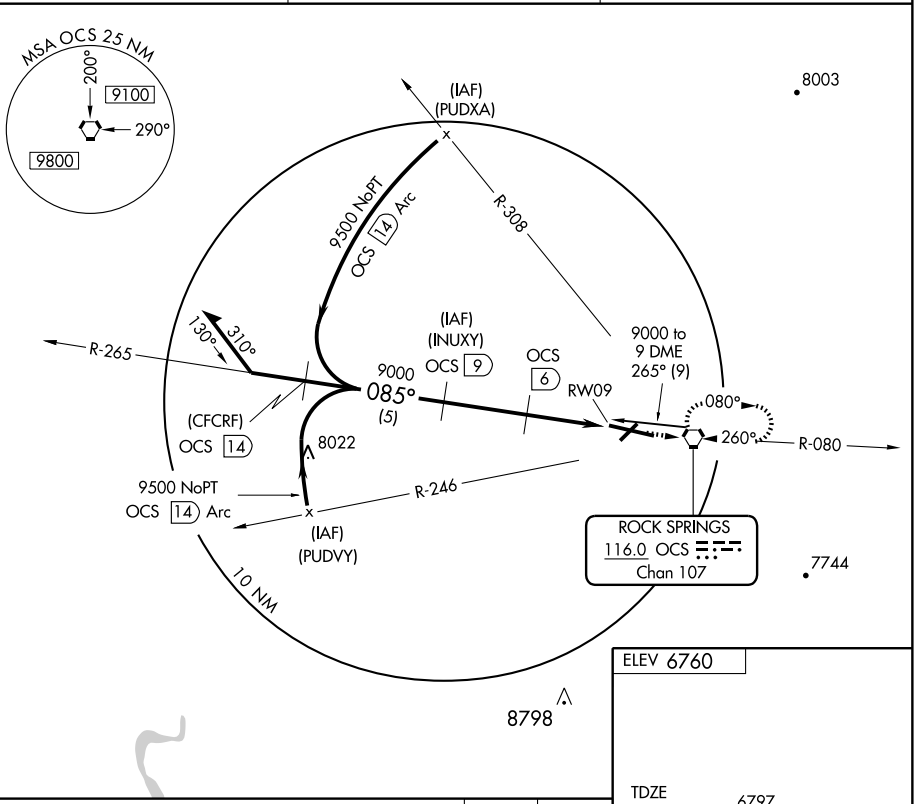
VOR/DME or GPS RWY 9

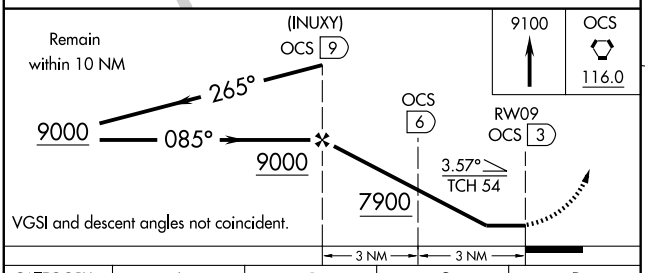
ROCK SPRINGS-SWEETWATER COUNTY (RKS)

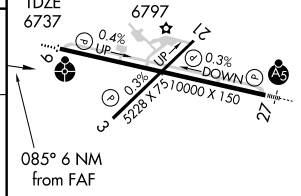
ODALS

MISSED APPROACH: Climb to 9100 direct OCS VORTAC and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-9	7000- ¾ 263 (300-¾)			7000-1 263 (300-1)
CIRCLING	7120-1 360 (400-1)	7220-1 460 (500-1)	7220-1½ 460 (500-1½)	7320-2 560 (600-2)

REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC OCS	APP CRS	Rwy Idg	10000
116.0	255°	TDZE	6760
Chan 107		Apt Elev	6760

VOR/DME RWY 27

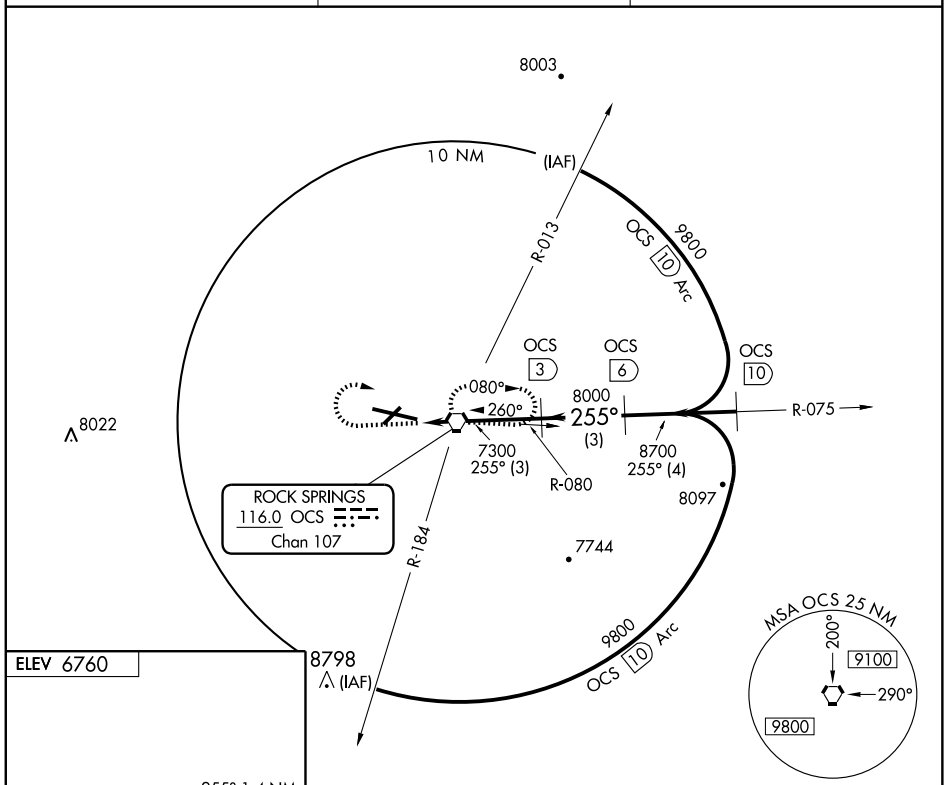
ROCK SPRINGS-SWEETWATER COUNTY (RKS)

Inoperative table does not apply to Cat. D.

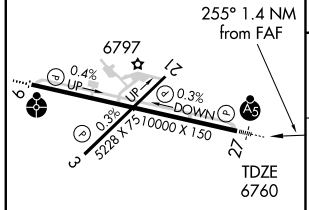
MALSR

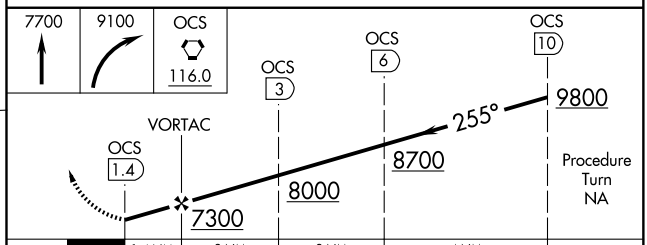
MISSED APPROACH: Climb to 7700, then climbing right turn to 9100 direct OCS VORTAC and hold.

ASOS	CASPER RADIO	UNICOM
118.375	122.6	122.8 (CTAF) L



ELEV 6760





CATEGORY	A	B	C	D
S-27	7040-½ 280 (300-½)			7040-1 280 (300-2)
CIRCLING	7120-1 360 (400-1)	7220-1 460 (500-1)	7220-1½ 460 (500-1½)	7320-2 560 (600-2)

REIL Rwys 3 and 21 L
MIRL Rwy 3-21 L
HIRL Rwy 9-27 L

NW-1, 14 JAN 2010 to 11 FEB 2010

NDB SAA	APP CRS	Rwy Idg	N/A
266	150°	TDZE	N/A
		Apt Elev	7012

NDB-A

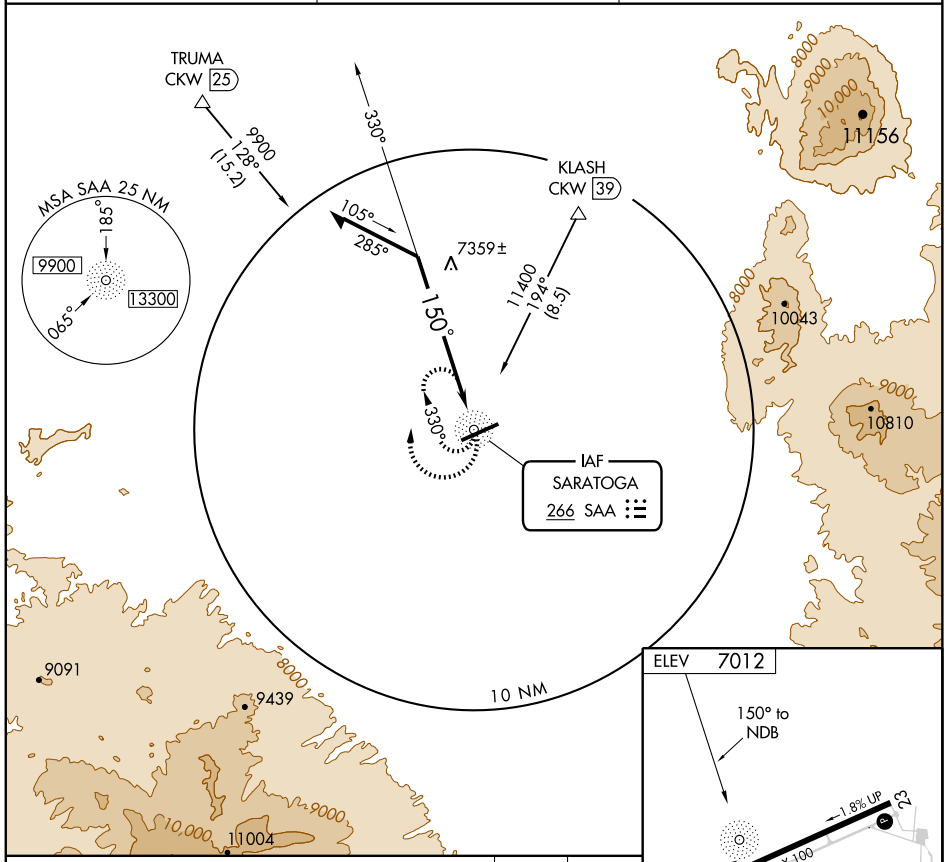
SARATOGA/ SHIVELY FIELD (SAA)

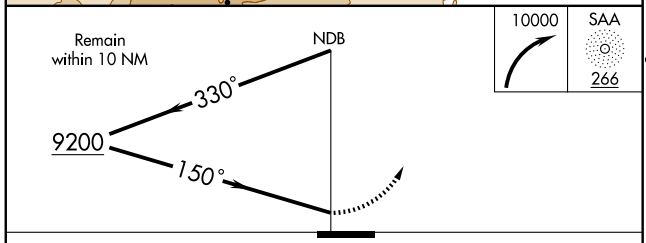
T
A NA

If local altimeter setting not received, use Rawlins altimeter setting and increase all MDAs 280 feet.

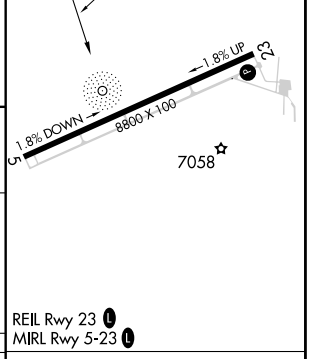
MISSED APPROACH: Climbing right turn to 10,000 in SAA NDB holding pattern.

AWOS-3	DENVER CENTER	UNICOM
118.175	132.1 254.35	122.8 (CTAF) L





10000 SAA 266



REIL Rwy 23 L
MIRL Rwy 5-23 L

CATEGORY	A	B	C	D
CIRCLING	7720-1¼	708 (800-1¼)	7720-2	7720-2¼
			708 (800-2)	708 (800-2¼)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
151°	TDZE	N/A
	Apt Elev	7012

RNAV (GPS)-B

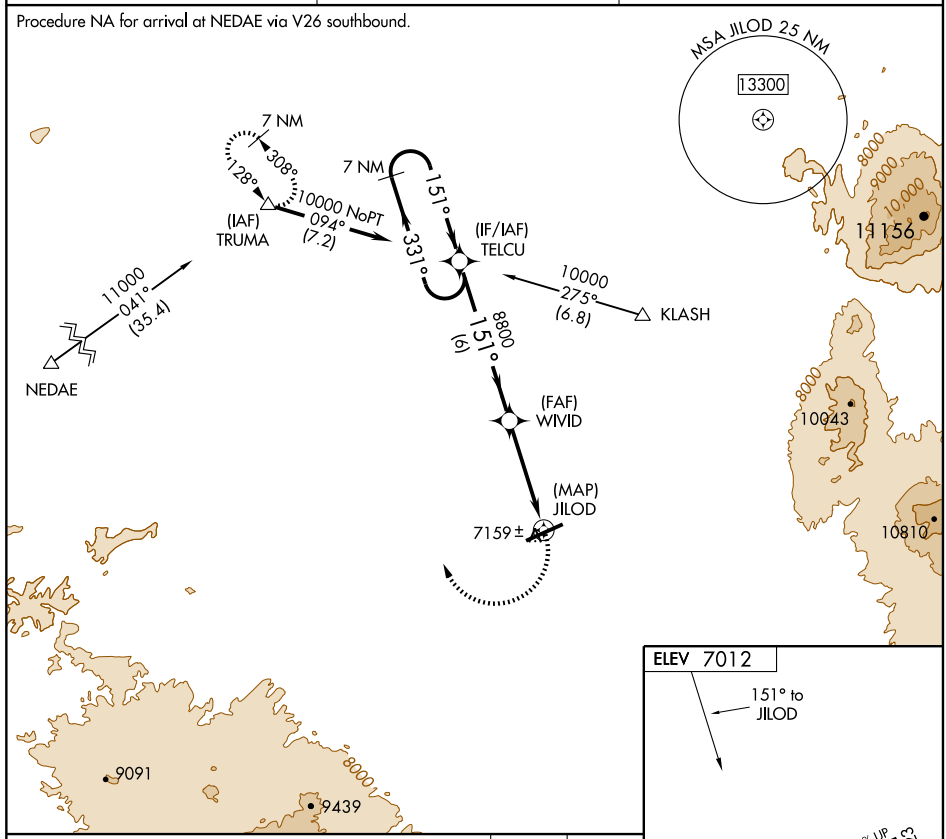
SARATOGA/ SHIVELY FIELD (SAA)

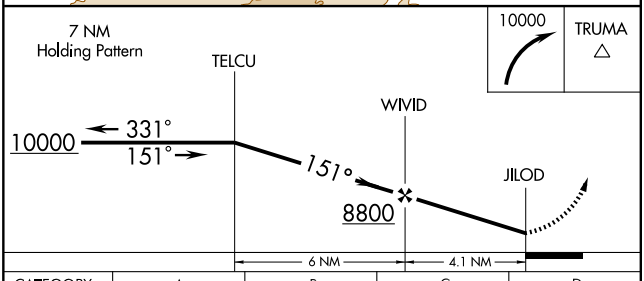
▼ ▲ NA — DME/DME RNP -0.3 NA. If local altimeter setting not received, use Rawlins altimeter setting and increase all MDAs 280 feet.

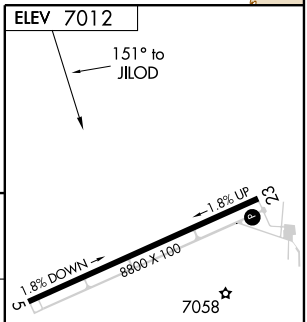
MISSED APPROACH: Climbing right turn to 10,000 direct TRUMA and hold.

AWOS-3	DENVER CENTER	UNICOM
118.175	132.1 254.35	122.8 (CTAF) L

Procedure NA for arrival at NEDAE via V26 southbound.







CATEGORY	A	B	C	D
CIRCLING	7600-1	588 (600-1)	7620-1¾ 608 (700-1¾)	7620-2 608 (700-2)

REIL Rwy 23 L
MIRL Rwy 5-23 L

NW-1, 14 JAN 2010 to 11 FEB 2010

SHERIDAN, WYOMING

AL-388 (FAA)

LOC/DME I-SHR	APP CRS	Rwy Idg	8300
108.7	323°	TDZE	3985
Chan 24		Apt Elev	4021

ILS or LOC/DME RWY 32

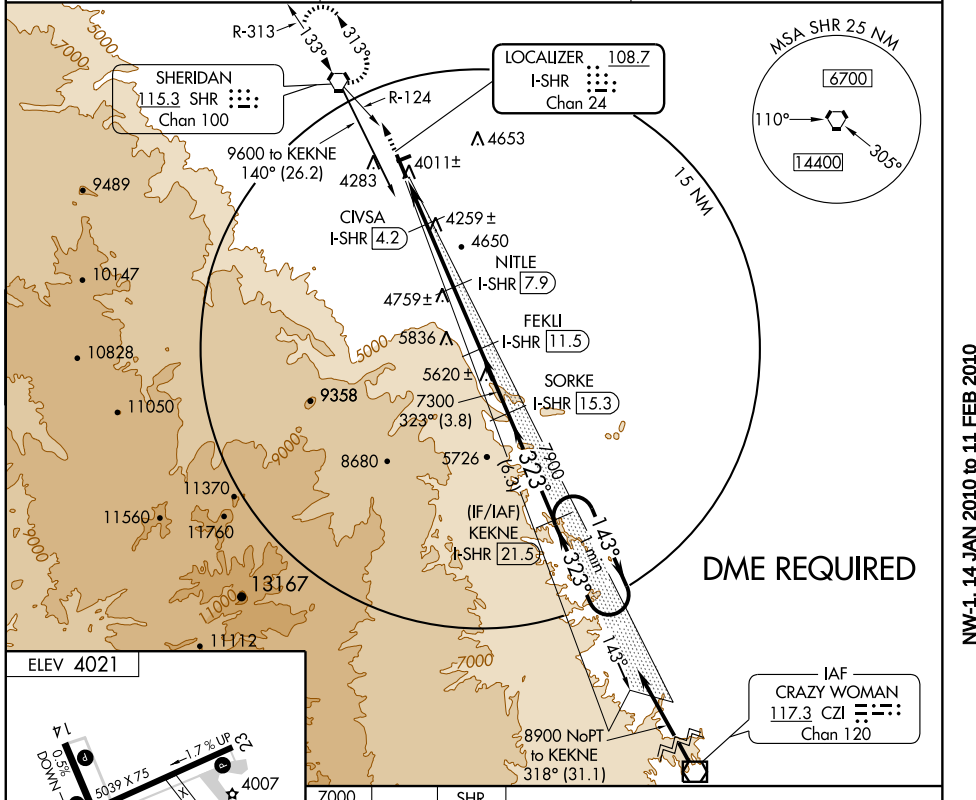
SHERIDAN COUNTY (SHR)

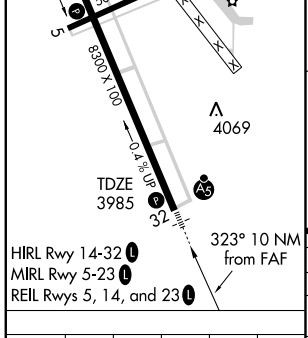
When VGSI inoperative, circling Rwy 5 and 23 NA at night.
For inoperative MALSR, increase S-LOC 32 Cat D visibility to 1.
If local altimeter setting not received, procedure NA.

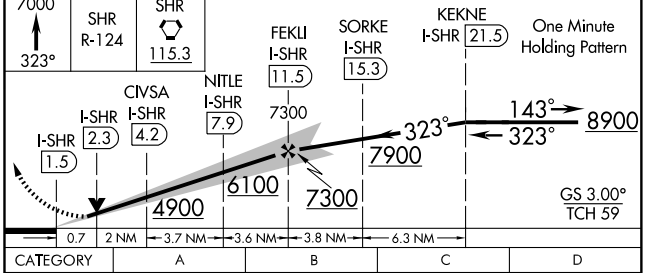
MALSR

MISSED APPROACH: Climb to 7000 via heading 323° and SHR VORTAC R-124 to SHR VORTAC and hold, continue climb-in-hold to 7000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	127.75 351.9	123.0 (CTAF)







Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-ILS 32	4185-½ 200 (200-½)			
S-LOC 32	4260-½ 275 (300-½)			4260-¾ 275 (300-¾)
CIRCLING	4580-1 559 (600-1)	4600-1 579 (600-1)	4620-1½ 599 (600-1½)	4740-2¼ 719 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

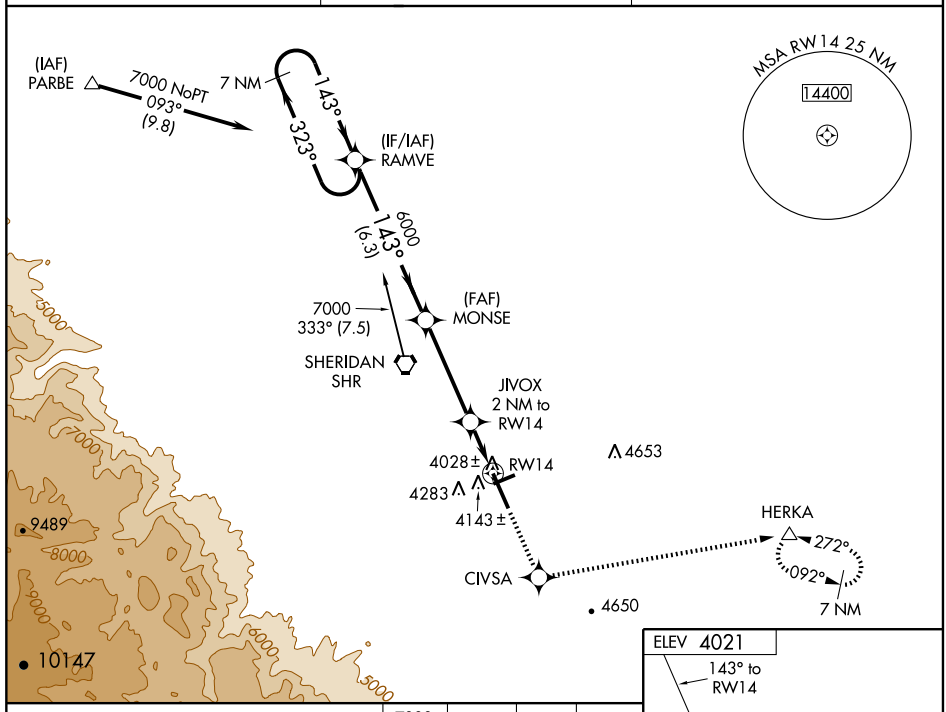
WAAS	APP CRS	Rwy Idg	8300
CH 81899	143°	TDZE	4014
W14A		Apt Elev	4021

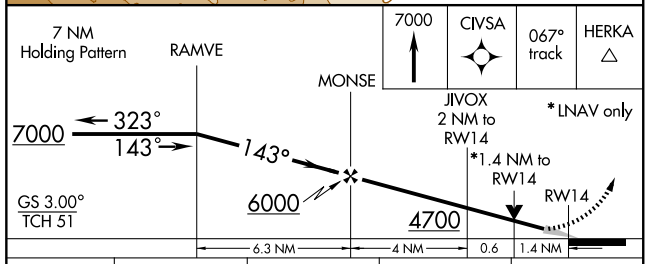
RNAV (GPS) RWY 14
SHERIDAN COUNTY (SHR)

DME/DME RNP -0.3 NA.
Baro-VNAV NA below -23°C (-9°F).
When VGSI inoperative, circling Rwy 5 and 23 NA at night.
If local altimeter setting not received, procedure NA.

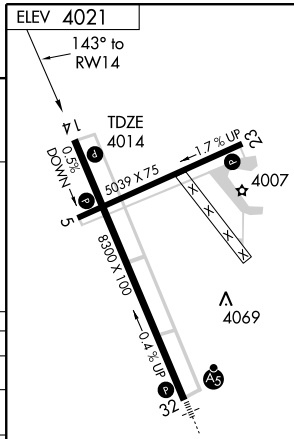
MISSED APPROACH: Climb to 7000 direct CIVSA and via 067° track to HERKA and hold, continue climb-in-hold to 7000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	127.75 351.9	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4264-¾ 250 (300-¾)			
LNAV/VNAV DA	4419-1½ 405 (400-1½)			
LNAV MDA	4500-1 486 (500-1)		4500-1¼ 486 (500-1¼)	4500-1½ 486 (500-1½)
CIRCLING	4580-1½ 559 (600-1½)	4600-1½ 579 (600-1½)	4620-1½ 599 (600-1½)	4740-2¼ 719 (800-2¼)



NW-1, 14 JAN 2010 to 11 FEB 2010

WAAS CH 65699 W32A	APP CRS 323°	Rwy ldg 8300 TDZE 3985 Apt Elev 4021

RNAV (GPS) RWY 32

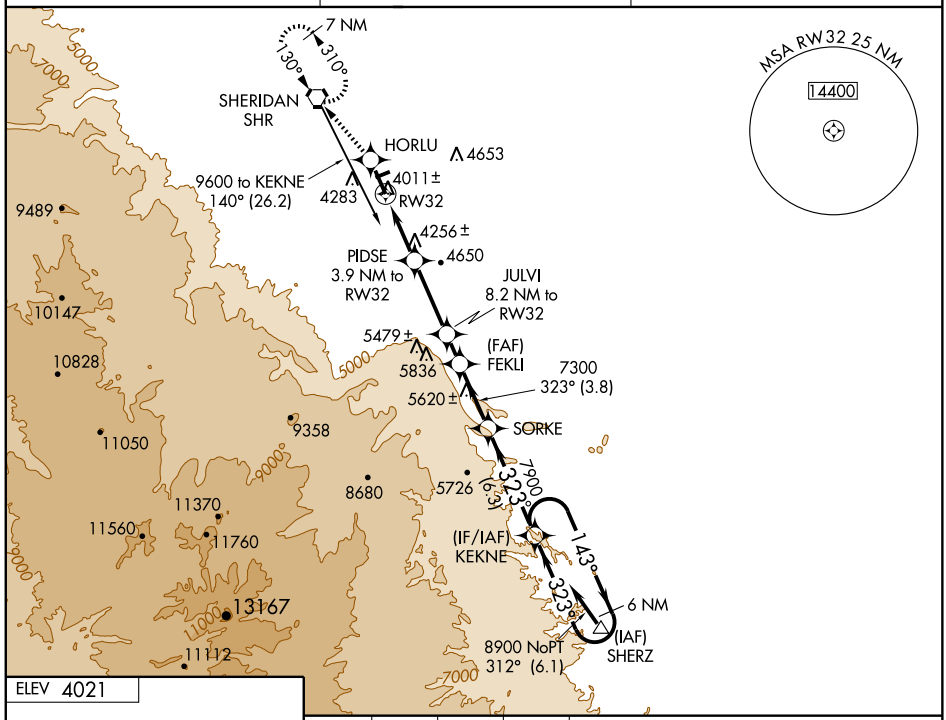
SHERIDAN COUNTY (SHR)

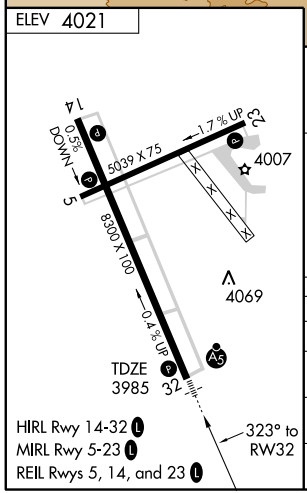
DME/DME RNP- 0.3 NA. Baro-VNAV NA below -23°C (-9°F). For inoperative MALSR, increase LPV visibility to ¾ all Cats. When VGSI inoperative, circling Rwy 5 and 23 NA at night. If local altimeter setting not received, procedure NA.

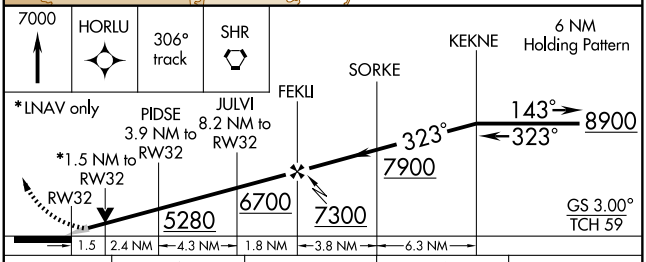
MALSR

MISSED APPROACH: Climb to 7000 direct HORLU and via 306° track to SHR VORTAC and hold, continue climb-in-hold to 7000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	127.75 351.9	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	4235-½ 250 (300-½)			
LNAV/VNAV DA	4426-1 441 (500-1)			
LNAV MDA	4520-½ 535 (500-½)		4520-1 535 (500-1)	4520-1¼ 535 (500-1¼)
CIRCLING	4580-1½ 559 (600-1½)	4600-1½ 579 (600-1½)	4620-1½ 599 (600-1½)	4740-2¼ 719 (800-2¼)

NW-1, 14 JAN 2010 to 11 FEB 2010

VORTAC SHR	APP CRS	Rwy Idg	8300
115.3	128°	TDZE	4014
Chan 100		Apt Elev	4021

VOR RWY 14

SHERIDAN COUNTY (SHR)

If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 7000 direct SHR VORTAC and hold, continue climb-in-hold to 7000.

ASOS	SALT LAKE CENTER	UNICOM
135.175	127.75 351.9	123.0 (CTAF) L

Maximum procedure turn entry altitude 10000.

R-299

(IAF) PARBE SHR 15

7500 NoPT 119° (5)

(IF) COBSI SHR 10

6600 119° (5)

164° 344°

FERSO SHR 5

119° 299°

5700 (5)

4479±

128°

IAF SHERIDAN 115.3 SHR Chan 100

4419±

4283

4653

10 NM

MSA SHR 25 NM

6700

110° 305°

14400

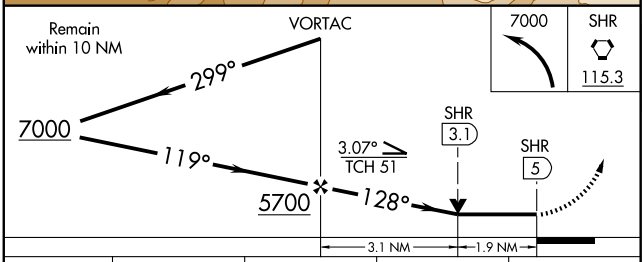
4650

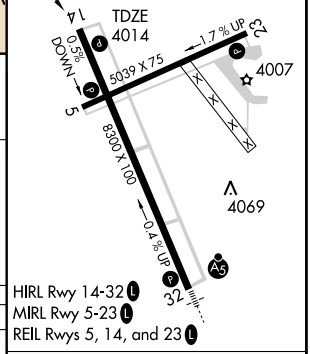
9489

10147

10828

5836





CATEGORY	A	B	C	D
S-14	4680-1	666 (700-1)	4680-1¾ 666 (700-1¾)	4680-2 666 (700-2)
CIRCLING	4680-1	659 (700-1)	4680-1¾ 659 (700-1¾)	4740-2¼ 719 (800-2¼)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NW-1, 14 JAN 2010 to 11 FEB 2010

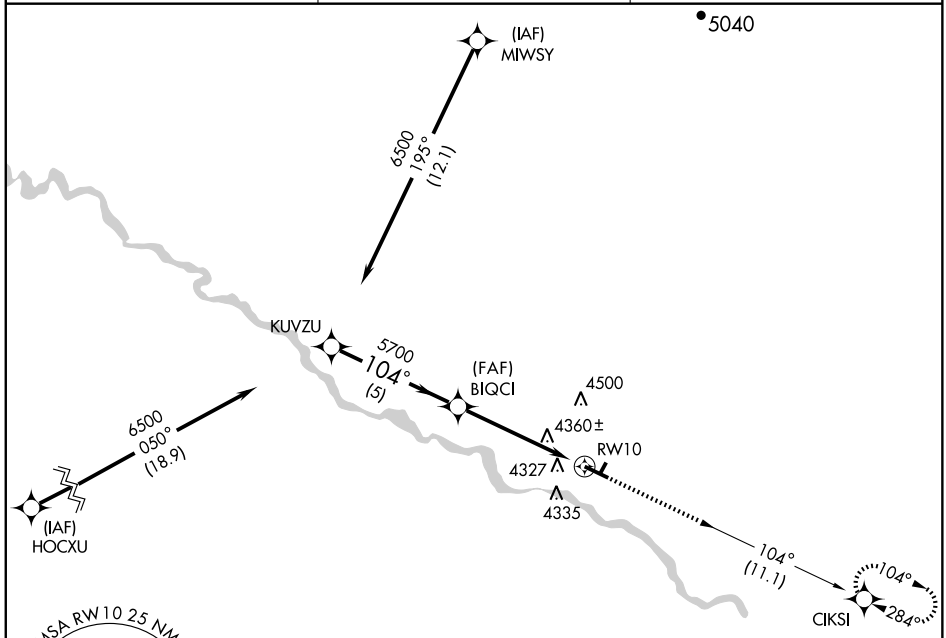
APP CRS	Rwy Idg	5703
104°	TDZE	4205
	Apt Elev	4205

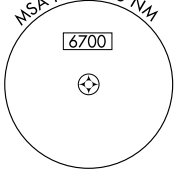
GPS RWY 10
TORRINGTON MUNI (TOR)

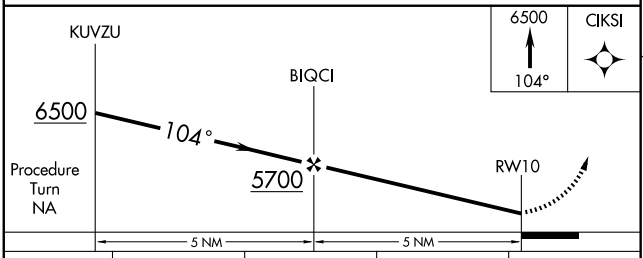
NA

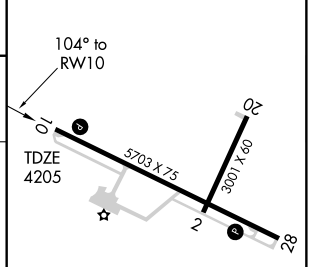
MISSED APPROACH: Climb to 6500 via 104° course to CIKSI WP and hold.

ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L









CATEGORY	A	B	C	D
S-10	4660-1 455 (500-1)		4660-1¼ 455 (500-1¼)	4660-1½ 455 (600-1½)
CIRCLING	4680-1 475 (500-1)		4680-1½ 475 (500-1½)	4820-2 615 (700-2)

REIL Rwy 10-28 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

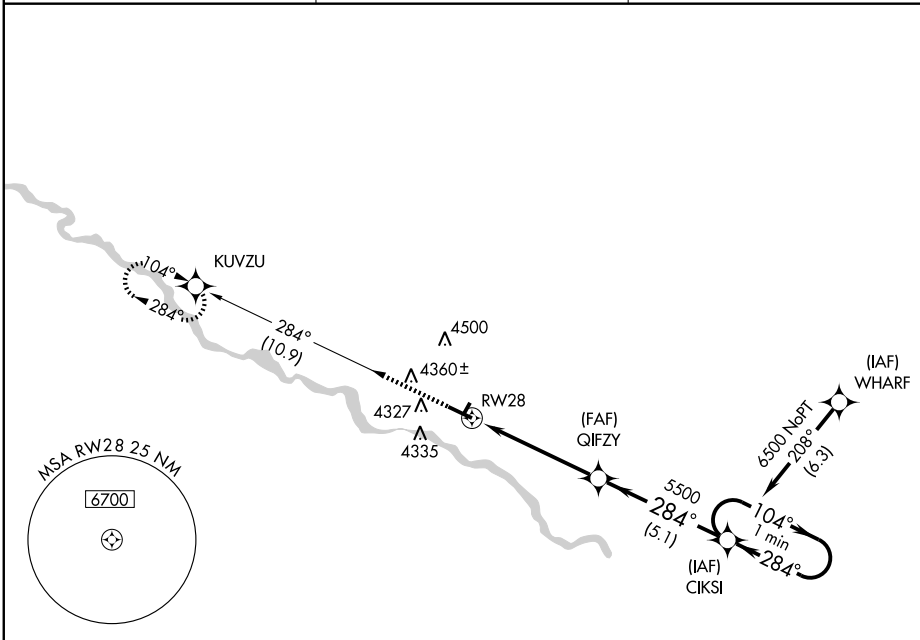
APP CRS	Rwy Idg	5703
284°	TDZE	4200
	Apt Elev	4205

GPS RWY 28
TORRINGTON MUNI (TOR)

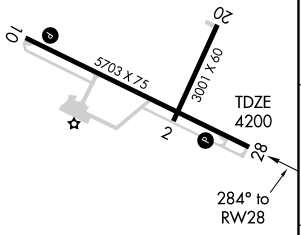
NA

MISSED APPROACH: Climb to 6500 via 284° course to KUVZU WP and hold.

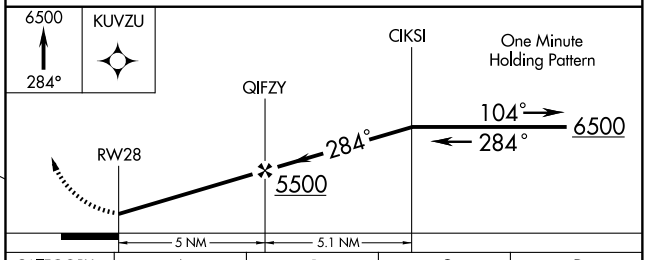
ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L



ELEV 4205



5396



CATEGORY	A	B	C	D
S-28	4620-1	420 (500-1)	4620-1¼	420 (500-1¼)
CIRCLING	4680-1	475 (500-1)	4680-1½ 475 (500-1½)	4820-2 615 (700-2)

REIL Rwy 10-28 L
MIRL Rwy 10-28 L

NW-1, 14 JAN 2010 to 11 FEB 2010

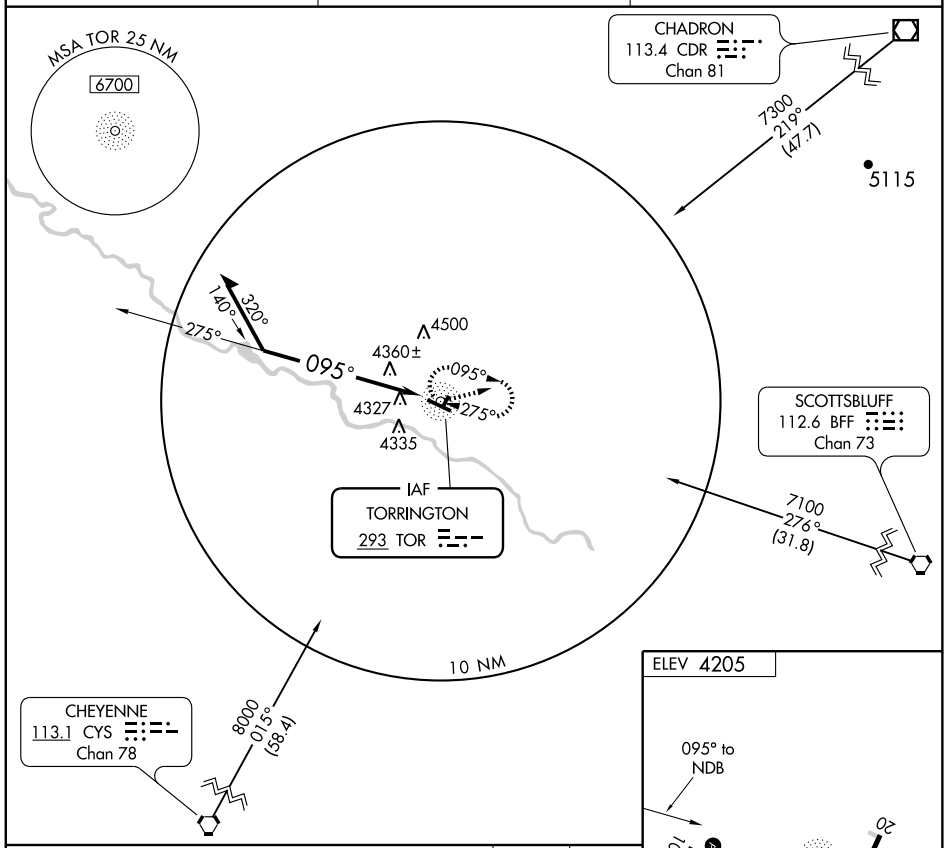
NDB TOR	APP CRS		
293	095°	Rwy Idg	5703
		TDZE	4205
		Apt Elev	4205

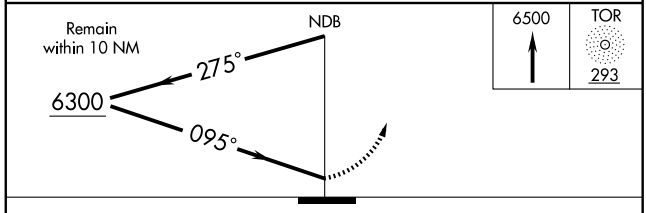
NDB RWY 10
TORRINGTON MUNI (TOR)

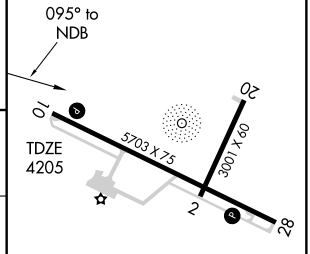
NA

MISSED APPROACH: Climb to 6500 in TOR NDB holding pattern.

ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L







REIL Rwy 10-28 L
MIRL Rwy 10-28 L

CATEGORY	A	B	C	D
S-10	4940-1	735 (800-1)	4940-2 735 (800-2)	4940-2¼ 735 (800-2¼)
CIRCLING	4940-1	735 (800-1)	4940-2 735 (800-2)	4940-2¼ 735 (800-2¼)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

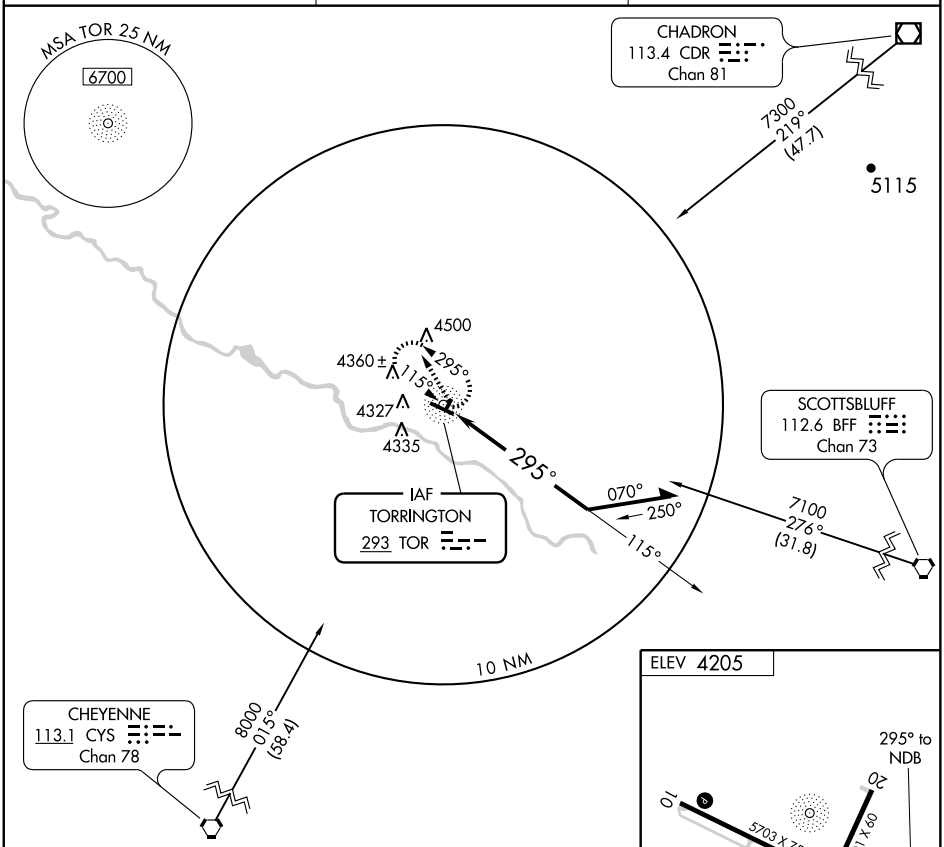
NDB TOR	APP CRS		
293	295°	Rwy Idg	5703
		TDZE	4200
		Apt Elev	4205

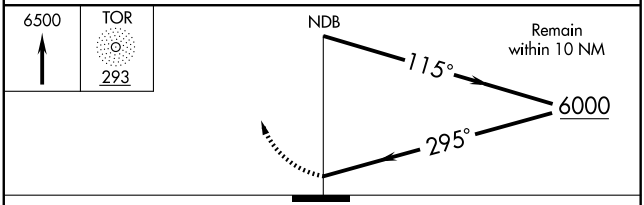
NDB RWY 28
TORRINGTON MUNI (TOR)

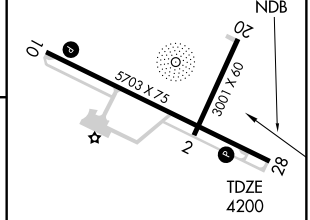
NA

MISSED APPROACH: Climb to 6500 in TOR NDB holding pattern.

ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L







REIL Rwy 10-28 L
MIRL Rwy 10-28 L

CATEGORY	A	B	C	D
S-28	4720-1	520 (600-1)	4720-1½ 520 (600-1½)	4720-1¾ 520 (600-1¾)
CIRCLING	4720-1	515 (600-1)	4720-1½ 515 (600-1½)	4820-2 615 (700-2)

Knots	60	90	120	150	180
Min:Sec					

NW-1, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy Idg	N/A
260°	TDZE	N/A
	Apt Elev	4774

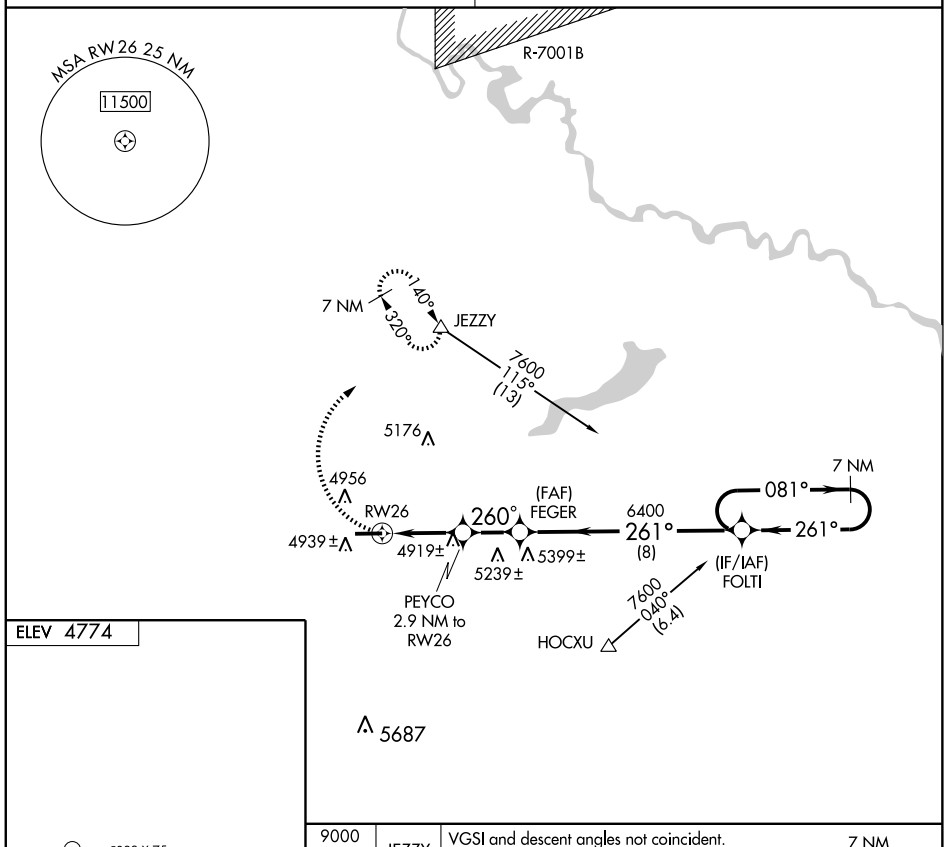
RNAV (GPS)-A

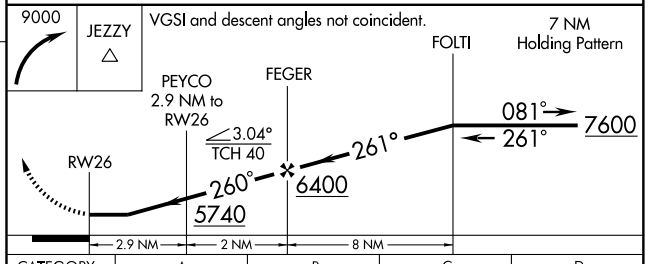
WHEATLAND/ PHIFER AIRFIELD (EAN)

DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Use Torrington altimeter setting; when not received, use Western Neb. Rgnl/William B. Heilig Field altimeter setting and increase all MDAs 100 feet and visibility Cats B/C ¼ mile. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 9000 direct JEZZY and hold, continue climb-in-hold to 9000.

DENVER CENTER	CTAF
135.6 385.6	122.9 L





CATEGORY	A	B	C	D
CIRCLING	5440-1 666 (700-1)	5460-1 686 (700-1)	5460-2 686 (700-2)	NA

MIRL Rwy 8-26 L

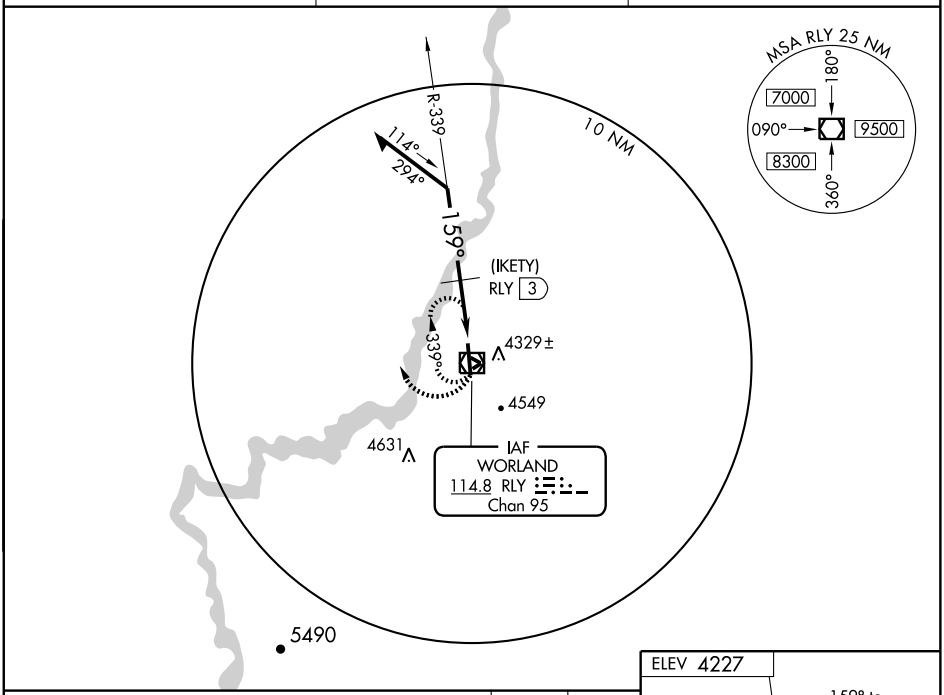
VOR/DME RLY	APP CRS	Rwy Idg	7005
114.8	159°	TDZE	4179
Chan 95		Apt Elev	4227

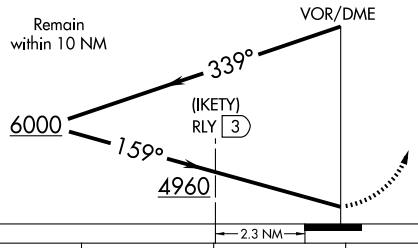
VOR or GPS RWY 16

WORLAND MUNI (WRL)

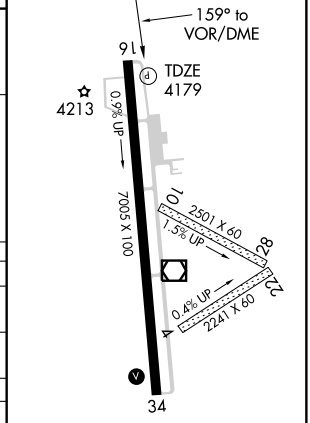
MISSED APPROACH: Climbing right turn to 6800 in RLY VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.475	133.25 285.6	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-16	4960-1 781 (800-1)	4960-1¼ 781 (800-1¼)	4960-2¼ 781 (800-2¼)	4960-2½ 781 (800-2½)
CIRCLING	4960-1 733 (800-1)	4960-1¼ 733 (800-1¼)	4960-2¼ 733 (800-2¼)	4960-2½ 733 (800-2½)
DME MINIMUMS				
S-16	4600-1 421 (400-1)		4600-1¼ 421 (400-1¼)	
CIRCLING	4840-1 613 (700-1)	4900-1 673 (700-1)	4900-2 673 (700-2)	4900-2¼ 673 (700-2¼)



REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L